OMB Number: 2030-0020
Expiration Date: 06/30/2024

Preaward Compliance Review Report for All Applicants and Recipients Requesting EPA Financial Assistance

Note: Read Instructions before completing form.

I. A. Applicant/Recipient (Name, Address, City, State, Zip Code)

Name: Letitia Austin

Address: 333 Ponoma St

City: Port Hueneme

State: CA: California Zip Code: 93041

B. DUNS No. 626953475

II. Is the applicant currently receiving EPA Assistance? ☐ Yes ☒ No

III. List all civil rights lawsuits and administrative complaints pending against the applicant/recipient that allege discrimination based on race, color, national origin, sex, age, or disability. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7.)

NONE

IV. List all civil rights lawsuits and administrative complaints decided against the applicant/recipient within the last year that allege discrimination based on race, color, national origin, sex, age, or disability and enclose a copy of all decisions. Please describe all corrective actions taken. (Do not include employment complaints not covered by 40 C.F.R. Parts 5 and 7.)

NONE

V. List all civil rights compliance reviews of the applicant/recipient conducted by any agency within the last two years and enclose a copy of the review and any decisions, orders, or agreements based on the review. Please describe any corrective action taken. (40 C.F.R. § 7.80(c)(3))

NONE

VI. Is the applicant requesting EPA assistance for new construction? If no, proceed to VII; if yes, answer (a) and/or (b) below.

☐ Yes ☒ No

a. If the grant is for new construction, will all new facilities or alterations to existing facilities be designed and constructed to be readily accessible to and usable by persons with disabilities? If yes, proceed to VII; if no, proceed to VI(b).

☐ Yes ☐ No

b. If the grant is for new construction and the new facilities or alterations to existing facilities will not be readily accessible to and usable by persons with disabilities, explain how a regulatory exception (40 C.F.R. 7.70) applies.

VII. Does the applicant/recipient provide initial and continuing notice that it does not discriminate on the basis of race, color, national origin, sex, age, or disability in its program or activities? (40 C.F.R 5.140 and 7.95)	☒ Yes	☐ No
a. Do the methods of notice accommodate those with impaired vision or hearing?	☒ Yes	☐ No
b. Is the notice posted in a prominent place in the applicant's offices or facilities or, for education programs and activities, in appropriate periodicals and other written communications?	☒ Yes	☐ No
c. Does the notice identify a designated civil rights coordinator?	☒ Yes	☐ No
VIII. Does the applicant/recipient maintain demographic data on the race, color, national origin, sex, age, or handicap of the population it serves? (40 C.F.R. 7.85(a))	☒ Yes	☐ No
IX. Does the applicant/recipient have a policy/procedure for providing access to services for persons with limited English proficiency? (40 C.F.R. Part 7, E.O. 13166)	☒ Yes	☐ No

X. If the applicant is an education program or activity, or has 15 or more employees, has it designated an employee to coordinate its compliance with 40 C.F.R. Parts 5 and 7? Provide the name, title, position, mailing address, e-mail address, fax number, and telephone number of the designated coordinator.

Robin Campos, HR Management Specialist, 333 Ponoma Street, Port Hueneme, CA 93041, rcampos@portofh.org, (805) 488-3677, ext. 2232

XI. If the applicant is an education program or activity, or has 15 or more employees, has it adopted grievance procedures that assure the prompt and fair resolution of complaints that allege a violation of 40 C.F.R. Parts 5 and 7? Provide a legal citation or Internet Address for, or a copy of, the procedures.

www.portofhueneme.org/about/policies/policies-section-500/

For the Applicant/Recipient

I certify that the statements I have made on this form and all attachments thereto are true, accurate and complete. I acknowledge that any knowingly false or misleading statement may be punishable by fine or imprisonment or both under applicable law. I assure that I will fully comply with all applicable civil rights statutes and EPA regulations.

A. Signature of Authorized Official	B. Title of Authorized Official	C. Date
Letitia Austin	CEO & Port Director	03/22/2022

For the U.S. Environmental Protection Agency

I have reviewed the information provided by the applicant/recipient and hereby certify that the applicant/recipient has submitted all preaward compliance information required by 40 C.F.R. Parts 5 and 7; that based on the information submitted, this application satisfies the preaward provisions of 40 C.F.R. Parts 5 and 7; and that the applicant has given assurance that it will fully comply with all applicable civil rights statures and EPA regulations.

A. *Signature of Authorized EPA Official	B. Title of Authorized Official	C. Date

*** See Instructions**

Instructions for EPA FORM 4700-4 (Rev. 06/2014)

General. Recipients of Federal financial assistance from the U.S. Environmental Protection Agency must comply with the following statutes and regulations.
Title VI of the Civil Rights Acts of 1964 provides that no person in the United States shall, on the grounds of race, color, or national origin, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. The Act goes on to explain that the statute shall not be construed to authorize action with respect to any employment practice of any employer, employment agency, or labor organization (except where the primary objective of the Federal financial assistance is to provide employment). Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act provides that no person in the United States shall on the ground of sex, be excluded from participation in, be denied the benefits of, or be subjected to discrimination under the Federal Water Pollution Control Act, as amended. Employment discrimination on the basis of sex is prohibited in all such programs or activities. Section 504 of the Rehabilitation Act of 1973 provides that no otherwise qualified individual with a disability in the United States shall solely by reason of disability be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance. Employment discrimination on the basis of disability is prohibited in all such programs or activities. The Age Discrimination Act of 1975 provides that no person on the basis of age shall be excluded from participation under any program or activity receiving Federal financial assistance. Employment discrimination is not covered. Age discrimination in employment is prohibited by the Age Discrimination in Employment Act administered by the Equal Employment Opportunity Commission. Title IX of the Education Amendments of 1972 provides that no person in the United States on the basis of sex shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any education program or activity receiving Federal financial assistance. Employment discrimination on the basis of sex is prohibited in all such education programs or activities. Note: an education program or activity is not limited to only those conducted by a formal institution. 40 C.F.R. Part 5 implements Title IX of the Education Amendments of 1972. 40 C.F.R. Part 7 implements Title VI of the Civil Rights Act of 1964, Section 13 of the 1972 Amendments to the Federal Water Pollution Control Act, and Section 504 of The Rehabilitation Act of 1973. The Executive Order 13166 (E.O. 13166) entitled; "Improving Access to Services for Persons with Limited English Proficiency" requires Federal agencies work to ensure that recipients of Federal financial assistance provide meaningful access to their LEP applicants and beneficiaries.

Items "Applicant" means any entity that files an application or unsolicited proposal or otherwise requests EPA assistance. 40 C.F.R. §§ 5.105, 7.25. "Recipient" means any entity, other than applicant, which will actually receive EPA assistance. 40 C.F.R. §§ 5.105, 7.25. "Civil rights lawsuits and administrative complaints" means any lawsuit or administrative complaint alleging discrimination on the basis of race, color, national origin, sex, age, or disability pending or decided against the applicant and/or entity which actually benefits from the grant, but excluding employment complaints not covered by 40 C.F.R. Parts 5 and 7. For example, if a city is the named applicant but the grant will actually benefit the Department of Sewage, civil rights lawsuits involving both the city and the Department of Sewage should be listed. "Civil rights compliance review" means any review assessing the applicant's and/or recipient's compliance with laws prohibiting discrimination on the basis of race, color, national origin, sex, age, or disability. Submit this form with the original and required copies of applications, requests for extensions, requests for increase of funds, etc. Updates of information are all that are required after the initial application submission. If any item is not relevant to the project for which assistance is requested, write "NA" for "Not Applicable." In the event applicant is uncertain about how to answer any questions, EPA program officials should be contacted for clarification. * Note: Signature appears in the Approval Section of the EPA Comprehensive Administrative Review For Grants/Cooperative Agreements & Continuation/Supplemental Awards form.

EPA KEY CONTACTS FORM

OMB Number: 2030-0020
Expiration Date: 06/30/2024

Authorized Representative: *Original awards and amendments will be sent to this individual for review and acceptance, unless otherwise indicated.*

Name: Prefix: | First Name: Letitia | Middle Name:
Last Name: Austin | Suffix:
Title: Public & Government Relations Manager

Complete Address:

Street1: 333 Ponoma St
Street2:
City: Port Hueneme | State: CA: California
Zip / Postal Code: 93041 | Country: USA: UNITED STATES

Phone Number: 18052712205 | **Fax Number:**
E-mail Address: laustin@portofh.org

Payee: *Individual authorized to accept payments.*

Name: Prefix: | First Name: Austin | Middle Name:
Last Name: Yang | Suffix:
Title: Director of Finance and Accounting

Complete Address:

Street1: 333 Ponoma St
Street2:
City: Port Hueneme | State: CA: California
Zip / Postal Code: 93041 | Country: USA: UNITED STATES

Phone Number: 18052712529 | **Fax Number:**
E-mail Address: ayang@portofh.org

Administrative Contact: *Individual from Sponsored Programs Office to contact concerning administrative matters (i.e., indirect cost rate computation, rebudgeting requests etc).*

Name: Prefix: | First Name: Austin | Middle Name:
Last Name: Yang | Suffix:
Title: Director of Finance and Accounting

Complete Address:

Street1: 333 Ponoma St
Street2:
City: Port Hueneme | State: CA: California
Zip / Postal Code: 93041 | Country: USA: UNITED STATES

Phone Number: 18052712529 | **Fax Number:**
E-mail Address: ayang@portofh.org

EPA KEY CONTACTS FORM

Project Manager: *Individual responsible for the technical completion of the proposed work.*

Name: Prefix: | First Name: Giles | Middle Name:

Last Name: Pettifor | Suffix:

Title: Environmental Manage

Complete Address:

Street1: 333 Ponoma St

Street2:

City: Port Hueneme | State: CA: California

Zip / Postal Code: 93041 | Country: USA: UNITED STATES

Phone Number: 18058144039 | **Fax Number:**

E-mail Address: gpettifor@portofh.org

EPA Form 5700-54 (Rev 4-02)

Other Attachment File(s)

*** Mandatory Other Attachment Filename:** 1234-Final Ventura County Air Monitoring Quality A

Add Mandatory Other Attachment | Delete Mandatory Other Attachment | View Mandatory Other Attachment

To add more "Other Attachment" attachments, please use the attachment buttons below.

Add Optional Other Attachment | Delete Optional Other Attachment | View Optional Other Attachment

BUDGET INFORMATION - Non-Construction Programs

OMB Number: 4040-0006
Expiration Date: 02/28/2022

SECTION A - BUDGET SUMMARY

Grant Program Function or Activity (a)	Catalog of Federal Domestic Assistance Number (b)	Estimated Unobligated Funds		New or Revised Budget		
		Federal (c)	Non-Federal (d)	Federal (e)	Non-Federal (f)	Total (g)
1. EPA-OAR-OAQPS-22-01	66.034	$	$	$ 500,000.00	$	$ 500,000.00
2.						
3.						
4.						
5. Totals		$	$	$ 500,000.00	$	$ 500,000.00

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Prescribed by OMB (Circular A -102) Page 1

SECTION B - BUDGET CATEGORIES

6. Object Class Categories	GRANT PROGRAM, FUNCTION OR ACTIVITY (1) EPA-OAR-OAQPS-22-01	(2)	(3)	(4)	Total (5)
a. Personnel	$ 25,000.00	$	$	$	$ 25,000.00
b. Fringe Benefits	0.00				0.00
c. Travel	0.00				0.00
d. Equipment	136,000.00				136,000.00
e. Supplies	3,600.00				3,600.00
f. Contractual	160,400.00				160,400.00
g. Construction	0.00				0.00
h. Other	175,000.00				175,000.00
i. Total Direct Charges (sum of 6a-6h)	500,000.00				$ 500,000.00
j. Indirect Charges	0.00				$ 0.00
k. TOTALS (sum of 6i and 6j)	$ 500,000.00	$	$	$	$ 500,000.00
7. Program Income	$ 0.00	$	$	$	$ 0.00

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Prescribed by OMB (Circular A -102) Page 1A

SECTION C - NON-FEDERAL RESOURCES

(a) Grant Program		(b) Applicant	(c) State	(d) Other Sources	(e)TOTALS
8.	EPA-OAR-OAQPS-22-01	$ 0.00	$ 0.00	$ 0.00	$ 0.00
9.					
10.					
11.					
12. TOTAL (sum of lines 8-11)		$ 0.00	$ 0.00	$ 0.00	$ 0.00

SECTION D - FORECASTED CASH NEEDS

	Total for 1st Year	1st Quarter	2nd Quarter	3rd Quarter	4th Quarter
13. Federal	$ 200,000.00	$	$	$ 100,000.00	$ 100,000.00
14. Non-Federal	$				
15. TOTAL (sum of lines 13 and 14)	$ 200,000.00	$	$	$ 100,000.00	$ 100,000.00

SECTION E - BUDGET ESTIMATES OF FEDERAL FUNDS NEEDED FOR BALANCE OF THE PROJECT

(a) Grant Program		FUTURE FUNDING PERIODS (YEARS) (b)First	(c) Second	(d) Third	(e) Fourth
16.	EPA-OAR-OAQPS-22-01	$ 200,000.00	$ 200,000.00	$ 100,000.00	$
17.					
18.					
19.					
20. TOTAL (sum of lines 16 - 19)		$ 200,000.00	$ 200,000.00	$ 100,000.00	$

SECTION F - OTHER BUDGET INFORMATION

21. Direct Charges:

22. Indirect Charges:

23. Remarks:

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Project Narrative File(s)

*** Mandatory Project Narrative File Filename:** 1240-FINAL Ventura County Air Monitoring Project Narra

Add Mandatory Project Narrative File | Delete Mandatory Project Narrative File | View Mandatory Project Narrative File

To add more Project Narrative File attachments, please use the attachment buttons below.

Add Optional Project Narrative File | Delete Optional Project Narrative File | View Optional Project Narrative File

OMB Number: 4040-0004
Expiration Date: 12/31/2022

Application for Federal Assistance SF-424

* 1. Type of Submission:
- [ ] Preapplication
- [x] Application
- [ ] Changed/Corrected Application

* 2. Type of Application:
- [x] New
- [ ] Continuation
- [ ] Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received: 03/22/2022

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: Oxnard Harbor District

* b. Employer/Taxpayer Identification Number (EIN/TIN): 95-6002317

* c. Organizational DUNS: 6269534750000

d. Address:

* Street1: 333 Ponoma St
Street2:
* City: Port Hueneme
County/Parish:
* State: CA: California
Province:
* Country: USA: UNITED STATES
* Zip / Postal Code: 93041-333

e. Organizational Unit:

Department Name:

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix:
* First Name: Letitia
Middle Name:
* Last Name: Austin
Suffix:

Title:

Organizational Affiliation: Oxnard Harbor District/Port of Hueneme

* Telephone Number: 18052712205
Fax Number:

* Email: laustin@portofh.org

Application for Federal Assistance SF-424

*** 9. Type of Applicant 1: Select Applicant Type:**

D: Special District Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

Environmental Protection Agency

11. Catalog of Federal Domestic Assistance Number:

66.034

CFDA Title:

Surveys, Studies, Research, Investigations, Demonstrations, and Special Purpose Activities Relating to the Clean Air Act

*** 12. Funding Opportunity Number:**

EPA-OAR-OAQPS-22-01

* Title:

Enhanced Air Quality Monitoring for Communities

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment | Delete Attachment | View Attachment

*** 15. Descriptive Title of Applicant's Project:**

Ventura County CA Community Air Quality Monitoring Network

Attach supporting documents as specified in agency instructions.

Add Attachments | Delete Attachments | View Attachments

Application for Federal Assistance SF-424

16. Congressional Districts Of:

* a. Applicant: CA-26 | * b. Program/Project: CA-26

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment | Delete Attachment | View Attachment

17. Proposed Project:

* a. Start Date: 12/01/2022 | * b. End Date: 12/01/2025

18. Estimated Funding ($):

* a. Federal	500,000.00
* b. Applicant	0.00
* c. State	0.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	500,000.00

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .

☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☒ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**

☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment | Delete Attachment | View Attachment

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: | * First Name: Kristin

Middle Name:

* Last Name: Decas

Suffix:

* Title: CEO & Port Director

* Telephone Number: 805-271-2536 | Fax Number:

* Email: kdecas@portofh.org

* Signature of Authorized Representative: Letitia Austin | * Date Signed: 03/22/2022

Section 5 Quality Assurance Statement

The quality assurance and quality control (QA/QC) practices proposed for the Ventura County Air Monitoring project will apply multiple layers of QA/QC protocols, which have been successfully implemented with prior successful deployments (over 10 years) of the Magee Scientific Model AE-33 aethalometer.

Instrument Description and Specifications

The Model AE-33 deployments will include a weatherproof installation of the instruments. The manufacturer provided static dissipative sample inlet tubing will be opened to unencumbered ambient air and positioned at one meter above the roof or other obstructions at the installation. The monitor is designed to provide instantaneous continuous black carbon concertation results which are used to generate 1-minute base averages which are then used for discrete 5-minute and 1-hour average values for seven different wavelength channels.

The size-selective inlet of $PM_{2.5}$ will be used in conjunction with meteorological sensor inputs for ambient temperature and pressure to allow for data to be reported in local conditions. Since other $PM_{2.5}$ measurements are made at local conditions having Aethalometer data in local conditions reduces uncertainty in comparing $PM_{2.5}$ data across measurements.

Quality Assurance and Quality Check (QA/QC) Protocol Outline

The QA/QC protocols will integrate remote digital tracking of instrument diagnostics (flows, optical data, etc.), independent QC checks (via manufacturer protocols and intervals listed below), manual review of instrument operation via a dedicated onsite technician, and monthly QA/QC reviews of all data collected in the monitoring network. All QA/QC responsibilities for the instrumentation and data will be implemented by two (2) specific staff members on this program: the Technical QA Officer and Operations and Maintenance (O&M) Lead.

Proposed QA/QC Staff

The Technical QA Officer is a senior air quality scientist with over 36 years of experience in the design, implementation, and management of air quality programs. The Technical QA officer will be responsible for overall technical performance including adherence to applicable regulatory guidelines and procedures, the QA plan, and ensuring technical quality of reports or reporting requirements. The O&M Lead is proposed as a dedicated field technician for the program and has twelve (12) years of direct experience with daily O&M and troubleshooting of the Magee Scientific Model AE-33 aethalometer. Through his experience as the primary onsite technician on prior black carbon monitoring programs, The O&M Lead has developed an unparalleled understanding of the intricacies involved with the proposed instrumentation for deployment in this monitoring network.

Proposed QA/QC Protocol Details

Remote digital tracking of each instrument's diagnostics will be performed via digital interface between each instrument and the data logging software and will be implemented during the installation of each monitoring station. Remove digital tracking allow automatic tracking and graphing each instrument's operational metrics, such as flow rates, optical intensities, and filter tape usage. By tracking these metrics and setting factory defined warnings/operational limits, the O&M Lead can proactively diagnose potential instrument issues and maintenance actions (such as flow discrepancies and leaks) prior to an instrument developing an operational issue or outright failure. The remote tracking of operational metrics allows for overall cost efficiency by reducing the number of onsite visits required for unscheduled maintenance actions.

In addition to remote digital tracking, independent QC checks will be performed on a regularly scheduled basis by a dedicated onsite technician (e.g., O&M Lead) per manufacturer specifications. These independent QC checks will be performed on the manufacturer's recommended schedule(s) and include:

- Stability checks, reports the stability of the optics' electronics.
- Clean air checks, reports the performance of the aethalometer's measurement cell.
- Flow verification check ensures instrument flow within manufacturer recommendations.
- Leak test (using air mass flow meter), ensures no flow leakage during operation.

On a monthly basis, all black carbon and meteorological data will undergo a thorough review and archiving process that consists of a well-defined six-step QA protocol, as follows:

- First, all raw instrument data is collected and archived in separate files by the O&M Lead.
- Second, the Technical QA officer graphs all monitoring data, reviews all data points to ensure that the data collected is reasonable compared to the historical data and operational metrics.
- Third, the Technical QA officer reviews the prior month's digital tracking and graphing of each instrument's operational metrics compared to the historical time series of data. During this process, the Technical QA officer will identify and questionable data points, ensure they are investigated and appropriately resolved.
- Fourth, the QA/QC data set is archived into a monthly file separate from the raw data files identified in Step #1.
- Fifth, the QA/QC data set will be formatted and capable for upload to the real-time air quality monitoring website, such that the QA/QC data is available for public consumption.
- Sixth, the QA/QC data will be transferred to a final data file for archiving in a long-term database that will be readily available for any public data requests or research opportunities.

ENVIRONMENTAL PROTECTION AGENCY (EPA)
Enhanced Air Quality Monitoring for Communities
EPA-OAR-OAQPS-22-01

Project Title:	Ventura County California Community Air Quality Monitoring Network
Applicant Information:	The Oxnard Harbor District, Port of Hueneme 333 Ponoma St., Port Hueneme, CA 93041
Primary contact person:	Giles Pettifor, 805-814-4039, gpettifor@portofh.org
DUNS number:	626953475
Set-Aside:	no set-aside

Brief Description of Applicant Organization: The Oxnard Harbor District (District) at the Port of Hueneme (Port) is an independent special district of the State of California that owns and operates the commercial Port. The Port is vital in the passenger vehicle and fresh fruit supply chain and contributes to the economic health of Ventura County, California.

Project Partner(s):

Partner Organization	Partner Primary Contact Name
Climate First: Replace Oil and Gas (CFROG)	Dr. Steven D. Colome
Climate First: Replace Oil and Gas (CFROG)	Shannon Simpson
Ventura County Air Pollution Control District (VCAPCD)	Dr. Laki Tisopulos
Ventura County Air Pollution Control District (VCAPCD)	Sam Michie
California State University, Channel Islands	Dr. Mary Woo

Project Location: Ventura County underserved and economically disadvantaged communities surrounding the Port of Hueneme including: Oxnard, CA (93033) and Port Hueneme, CA (93041)

Air Pollutant Scope: Particle Pollution (PM_{10}, $PM_{2.5}$, black carbon)

Budget Summary:

EPA Funding Requested	Total Project Cost
$500,000	$500,000

Project Period: December 2022 to December 2025

Short Project Description: The Ventura County California Community Air Quality Monitoring Network will leverage the Port's existing air quality monitoring station with additional source-specific stations to understand and communicate air pollution burden from freight and transportation networks in the Oxnard Plain of Ventura County, California, a major transportation corridor between Los Angeles and Central Coast of CA. The project will install four (4) air monitoring stations and develop a community-based team to create communication tools that facilitate understanding of the monitored air quality data, including a multilingual website to provide public access to the data. The project partners will implement a community focused program by engaging the local economically disadvantaged and underserved community impacted by the freight and transportation network, including establishing a Community Advisory Council and continuing to nurture a foundation of trusting relationships and inform the public and local community on local air quality.

Section 1 Project Summary and Approach

A. Overall Project Description

The Oxnard Harbor District (District) owns and operates the Port of Hueneme (Port), a deep-water, commercial seaport located in Ventura County, California. The Port is partnering with a team of local air quality stakeholders including Ventura County Air Pollution Control District (VCAPCD), California State University Channel Islands (CSUCI), and Climate First: Replacing Oil & Gas (CFROG), a local community environmental advocacy group, to assess the impact of emissions from freight and transportation networks and wildfire smoke on the local disadvantaged and underserved communities.

To achieve our goal, we propose to use the Magee AE33 aethalometer to measure black carbon (BC) and brown Carbon (BrC). The BC measurement is attributed to incomplete combustion process and may be used as a surrogate for diesel particulate matter (DPM). Brown carbon is associated with wood and biomass burning and may be used to identify impacts from wildfire smoke. These measurements will be made within the Oxnard/Port Hueneme disadvantaged and underserved communities of Ventura County that are intersected by regional transportation corridors[1].

In California, DPM has become a focal point in environmental justice (EJ) areas ever since the California Air Resources Board (CARB) identified it as an air toxic. DPM levels are often a significant contributor in health risk assessments conducted in these areas, as evidenced by the California Communities Environmental Health Screening Tool (CalEnviroScreen 4.0). CalEnviroScreen identifies communities that are disproportionately burdened by multiple sources of pollution through a variety of indicators. DPM originates from diesel exhaust and comprises a complex mixture of chemicals (e.g., polycyclic aromatic hydrocarbons, formaldehyde, etc.). Studies have linked DPM with a range of negative health outcomes such as lung and heart diseases and lung cancers[2]. Because DPM emissions are variable and highly source dependent, measurement of $PM_{2.5}$ alone is not a direct indicator of DPM and therefore cannot be used for source attribution[3]. Hence, measurement of DPM as BC is advantageous for risk assessment of PM exposure and subsequent policy decisions. BC concentrations have been successfully monitored and sourced (diesel fuel, wildfire, etc.) using multi-wavelength aethalometers[4].

Since December 2019, the Port has collected particulate matter data (PM_{10}, $PM_{2.5}$, and BC) at an air monitoring station east of the Port at *Art Haycox Elementary School*. This monitoring site was installed per a community request made by *All Inclusive Residents for Equity* (AIRE). Using the data gathered from this monitor, the Port has developed multilingual presentations using graphical demonstrations and videos[5] of the air quality data which foster understanding of complicated atmospheric science concepts in dignifying and culturally relevant ways. This project would build on this knowledge by procuring and installing four (4) additional aethalometers to expand on the Port's network and build a Ventura County Community Air Quality Monitor Network. Three of the aethalometers will be installed near freight and transportation corridors that cross local disadvantaged and underserved communities, while one (1) will be installed at a site representative of the county background levels. The project funding will create a robust air monitoring network for spatial and temporal documentation of BC and DPM to identify results of current emission-reduction efforts and to inform future policy recommendations

---

[1] www.epa.gov/sites/default/files/2013-12/documents/black-carbon-fact-sheet_0.pdf

[2] ww2.arb.ca.gov/resources/selected-references-diesel-health-effects

[3] ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health

[4] www.euro.who.int/__data/assets/pdf_file/0004/162535/e96541.pdf

[5] www.youtube.com/watch?v=L8nwF-fuwsQ

We will build the Ventura County Community Air Quality Monitor Network with structured community engagement that allows members of our disadvantaged and underserved communities to participate in project decisions and direction. To this end, we will:

- Establish a Community Advisory Council (CAC) with local community members and involve the CAC in design, implementation, review, maintenance phases of building the network.
- Establish a Technical Advisory Committee (TAC), made of academia and agency representatives, to ensure high-quality data is generated.
- Build a multilingual public website showing monitor locations and near real-time air quality data.
- Provide internships to local CSUCI students to work with data and community engagement efforts.
- Leverage other community engagement opportunities as guided by the CAC such as development of K-12 educational materials and interviews on local public media stations.
- Foster local community involvement in air quality policy decisions via increased technical understanding via culturally relevant and dignifying communication tools.

In addition to improving air quality knowledge within our disadvantaged communities, we will communicate monitoring data to both local decision makers and the scientific community. The Port and CFROG will leverage their networks to communicate data and inform policy making by presenting to Oxnard and Port Hueneme City Councils, Ventura County agencies, and other local decision makers. To further engage the scientific community, the data will be open sourced via our public website, CSUCI student interns will present results at professional conferences, and technical manuscripts will be published in scholarly journals.

In summary, we propose building a Ventura County Community Air Quality Monitor Network via the installation of four (4) BC aethalometers to understand and communicate air pollution burden from freight and transportation networks and wildfire emissions in Ventura County, California. The network will be located near transportation corridors that intersect our disadvantaged and underserved communities and focus on providing local and real-time data to inform community members and discussions of air quality. The data will also be communicated to local decision makers for informed policy making and to the scientific community to improve our knowledge base on ambient BC concentrations and sources. Over the long-term, the multiple partnerships with the Port, VCAPCD, CSUCI, and CFROG and community engagement proposed here will build the necessary relationships to tackle air pollution issues collectively.

The Port will be the primary administrator of the grant, contracting directly with EPA. The Port's designated project manager, Giles Pettifor, will ensure compliance with the grant requirements to ensure the project proceeds according to the schedule and that the progress of the project is communicated to the EPA. Progress reports will be produced and reviewed with CAC and TAC prior to submitting to EPA. After nine to twelve months of data are collected, a presentation will be offered to Oxnard and Port Hueneme City Councils, community groups, and other local organizations. Final project results will be presented in public meetings to community groups and city leaders. Following review of draft final report by CAC and TAC, a final project report, along with future plans and implementation, will be submitted.

B. Project Significance

Through consistent and aggressive emission controls at the local, state, and federal level, air quality in Ventura County has improved significantly over the years. Despite these improvements, the County has yet to attain the federal 8-hour ozone standard and is currently classified as a serious non-attainment area. Similarly, the County is non-attainment with respect to the California PM_{10} standard. Despite this success, the Oxnard/Port Hueneme community continues to suffer a disproportionate share of emissions

from industrial Title V facilities, from industrial and agricultural sources, trucking and logistics activity, localized manufacturing, and energy production activities.

The local disadvantaged and underserved communities are exposed to emissions originating from a variety of different sources, including emissions from trucks and other mobile sources traversing the transportation corridor connecting the Port, military installations, local agricultural and industrial businesses to Freeway 101 and other transportation routes. Mobile sources (on-road and off-road) tend to dominate the criteria pollutant emissions the community is exposed to, contributing approximately 63% of the VOC/ROG (Reactive Organic Gases) and NO_x (Oxides of Nitrogen) emissions, 82% of CO (Carbon Monoxide) and 80% of SO_x (Oxides of Sulfur) emissions. There are approximately 144 permitted stationary and area sources located in the geographic area of interest with emissions contributing to the remainder of the community exposure. The stationary sources in the study area include a broad spectrum of emission sources, including gas stations, autobody shops, and dry cleaners, but also includes more than 35 larger industrial sources with sizable emissions footprint, including five Title V sources engaged in power generation, wastewater treatment, oil & gas processing, paper manufacturing, cardboard packaging, metal forging, including two naval bases.

The CalEnviroScreen shows the Oxnard/Port of Huene community to the east of Port of Hueneme. The orange color shows the areas with the estimated highest pollution burden and sensitivities per CalEnviroScreen scores. The areas where the air monitoring system will be deployed cover areas with the highest percent of pollution burden.

This project will benefit the public and the environment by not only measuring air pollution, specifically BC as a surrogate for DPM, but also educating the community through meaningful engagement (e.g., the CAC), presentations, website with live data, and internships for university students. The long term goal being DPM source reduction through community advocacy and informed policy.

Section 2 Community Involvement

A. Community Partnerships

Our three partners offer resources and expertise that strongly support the work proposed in this grant application. These partners include:

1. CFROG - A local environmental advocacy group that focuses on protecting human health and ensuring oil industry accountability and oversight on the Central Coast. They have a strong record of bringing scientific data and community members together to successfully advocate for the generation of informed environmental and industry policies.

2. VCAPCD - Our county air pollution control district that is responsible for compliance monitoring of county airsheds and working with businesses and industry to reduce harmful emissions and meet state and federal air quality standards.
3. CSUCI - The only public 4-year university in Ventura County, is a Hispanic Serving Institution (HSI), and supports a student body with 62% first generation students. The university promotes student-centered teaching with Community Engagement, Integrative, International, and Multicultural Mission Pillars.

VCAPCD provides expertise on air quality monitoring data, location of stations and measurement strategies, while CFROG and CSUCI bring established connections to community members and decision makers in our EJ communities. Partnering with the Port which is heavily engaged with the local community, will bring many benefits to the EJ communities and provide a sustainable relationship well past the three years of this grant for the betterment of the community. The specific details on expertise, resources, and roles are summarized in the following table.

Partner	Expertise and Resources	Roles
Climate First: Replace Oil and Gas (CFROG) Dr. Steven Colome Shannon Simpson ED	• Community engagement. • Advocacy at the city, county, and state levels	• Aid with CAC and TAC formation and coordination • Present findings to decision makers • Community outreach (website, professional network)
Ventura County Air Pollution Control District (VCAPCD) Dr. Laki Tisopolus Sam Michie	• Air quality monitoring • Deploying air quality stations • Air quality trends on the Oxnard Plain	• Study design • Identify locations and prepare sites for air quality monitoring equipment • Equipment quality control
California State University, Channel Islands (CSUCI) Dr. Mary Woo Dr. Sean Anderson	• Student research and training • Connection to EJ communities through local students • Technical publications	• Design and manage student internships with the Port and CFROG • Students present findings to decision makers and at professional conferences • Connection to community through local students - to foster awareness and advocacy • Foster future air quality specialists • Provide credibility to data collected via technical publications

CFROG will continue to influence climate policy, provide science-based information and increase environmental awareness while also engaging the community and mentoring local climate leaders to be effective. CFROG is a strong supporter of community coalitions, and this partnership exemplifies their mission and provides continued support in engaging the EJ community.

For CSUCI, the benefits of this partnership include having access to the air monitoring data for student research, internships with the Port and CFROG, improving the retention of existing students and increasing matriculation for first generation students. CSUCI may also benefit from technical publications associated with the university through the research and technical knowledge gained from this partnership.

For VCAPCD, this grant will provide additional air quality data enhancing its mission to protect health and agriculture from the adverse effects of air pollution by monitoring the air quality. These additional four (4) air monitoring stations will provide enhanced characterization of the existing ambient $PM_{2.5}$ monitoring network in the area. Ultimately, air quality data is critical in continuing to achieve or maintain state and federal air quality standards.

For all the partners, establishing this partnership through this grant sets the foundation for a long partnership through the shared goal of improving air quality in the community we live in, enhance awareness of air pollution, and assist the community through education and community engagement.

B. Community Engagement

The community will be engaged from the onset of the project. The Port is an active community partner committed to preserving and protecting the health and viability of the local and regional communities and economies alike. It has made a commitment, via board resolution, to minimize, mitigate and eliminate the environmental impacts associated with trade operations on the surrounding community and local environment by implementing green initiatives through community and customer partnerships. As part of its commitment to being in full compliance with federal, state and local regulations, and to expand its environmental stewardship program, the port has partnered with the Ventura County Air Pollution Control District to build a first-of-its-kind climate action plan called PHRESH (Port of Hueneme Reducing Emission, Supporting Health). From the initial conclusions drawn from the first community monitoring sensor, the Port recently made a video in Spanish to explain the basic concepts of local air quality in the region to the community.[6]

Raising awareness through presentations and facilitating greater access to democratized air quality data, local community members can take ownership of information and become empowered to address the specific set of social and political challenges that they experience. Co-creation of a community specific context helps provide the clarity necessary to better examine and understand the types of processes and systems that perpetuate poverty, injustice, and inequity. Allowing The Port to stand alongside community members to re-imagine, and implement, new and creative systems that stop this imbalance and enable local solutions to address local and global challenges like climate change.

Building on the PHRESH initiative, this air monitoring community program will continue to engage the community and build new partnerships. During the first year of capacity building, CFROG will assist with the Port with the creation of the TAC and assist with the creation and recruitment of the CAC. CSUCI will identify students to participate in project though community service-learning internships at CFROG, the Port and VCAPCD. Throughout the project, there will be continuous engagement with the community on air quality measurements and data results.

[6] www.youtube.com/watch?v=L8nwF-fuwsQ

Examples of some of the types of community engagement to be developed in close collaboration with the CAC may include:

- ✓ Build capacity and identify and hire staff to conduct community air quality conversations
- ✓ Capture qualitative experiential data through informal focus groups
- ✓ Identify air quality education needs assessment
- ✓ Follow up with development of community participants in environmental stewardship, social justice, and climate action utilizing air quality focus
- ✓ Hold meetings to identify opportunities for continuous engagement and education in community air quality measuring
- ✓ Collaborate in media creation and distribution of educational outreach materials to support CFROG and CSUCI
- ✓ Supervise Interns at the Port, collaborate in Debriefs with students from CSUCI
- ✓ Analyze data in collaboration with TAC, CSUCI students and the Port Staff
- ✓ Present findings in communities and local government
- ✓ Produce a report addendum for bigger research project

Section 3 Environmental Justice and Underserved Communities

The proposed project addresses and promotes Environmental Justice (EJ) concerns by monitoring real-time BC concentrations as a surrogate for DPM in disadvantaged and underserved communities. Studies show that tens of thousands of people living in communities around ports and transportation routes like highways face an increased risk of cancer, asthma, birth defects, and decreased lung function. These EJ communities are also heavily populated by immigrants, minorities, and economically disadvantaged people. Historically, these groups are politically underrepresented and have limited access to financial resources or scientific data with which to seek solutions to their communities' increased pollution burdens.

Ventura County has a large Spanish-speaking and immigrant population including farm workers and their families. The Port seeks to prioritize addressing environmental justice and ensure a comprehensive community approach. As it works to develop a new paradigm of community/Port partnerships, this project will help to establish a foundation of equity and community empowerment to help launch a decarbonized, equitable future. The Port's vision mirrors Federal Executive Orders to secure environmental justice and spur economic opportunity, to mobilize resources to invest in and address current and historical environmental and racial injustices. The areas near the Port and local industrial areas where the air monitoring systems will be located, are in historically underserved communities, mainly economically disadvantaged Latino community. From EPA's EJSCREEN, the community is in the 80-90% percentile as an environmental indicator. From a demographic index perspective, the community is within the 80-100% percentile, depending on the location. The community includes 37-89% low income and 85-100% people of color.

Section 4 Environmental Results

A. Expected Outputs and Outcomes

Through consistent and aggressive emission controls at the local, state, and federal level, air quality in Ventura County has improved significantly over the years. The addition of the BC monitors will enhance current and historical monitoring data in Ventura County and provide additional air quality characterization in the Oxnard Plains. Additionally, spatial and seasonal distribution information that

may be present in the data could provide insight on the transport and influence of emissions originating from major traffic corridors and spreading into communities. The proposed outputs include:

1. Acquire four (4) Magee Scientific Model AE33 Aethalometers capable of measuring BC concentrations at a fine (1-minute) temporal resolution and also capable of distinguishing the fossil fuel (e.g. DPM) and biomass burning (e.g. wood smoke or wildfire PM emissions) from the total BC concentration. Both fossil fuel and biomass burning emissions are sources that impact the residents in the Oxnard and Port communities.
2. Establish Community Advisory Council (CAC) to introduce project, measurement capabilities and objectives. CAC to be engaged throughout the study for advice, review and participation.
3. Establish a Technical Advisory Committee (TAC) of academics, agency representatives, to review research design, study objectives, data management and participate in technical communications.
4. Identify long-term monitoring locations along transportation and logistics routes through this EJ community, with one location selected as representative of county background levels and not directly impacted by near-road emission sources.
5. Develop MOUs for long-term placement of new AE-33 monitors, purchase and install weatherproof enclosures at each monitoring location and establish real-time communication protocols for transmission of each monitoring station.
6. Deploy the air quality and meteorological instruments and, after three months of data collection, present preliminary baseline data for joint CAC/TAC review. Due to short-term and season limitations of this initial data, this will be considered preliminary. After the air quality and meteorological data undergoes the proper quality assurance (QA) protocols and the measurements are considered representative of ambient concentrations, the air quality and meteorological data will be shared with local decisionmakers and the public.
7. Establish website for near real-time public access to the BC and meteorological measurements. Develop clear graphic representations for temporal and spatial concentration differences among sampling sites in this community
8. Progress reports as required will be produced, reviewed by CAC and TAC, then submitted to EPA.
9. Presentations on the project will be offered to Oxnard and Port Hueneme City Councils, community groups, faith organizations, the Oxnard Metropolitan Advisory Council (MAC) for County Supervisor and other interested parties.
10. As data are acquired, policy opportunities will be generated for reducing exposures through a combination of emission control and, in the case of wildfires, personal protection and behavioral recommendations.
11. It is the commitment of this team to maintain operation of the equipment after the term of this project. A long-term output of the project is an opportunity to document changes in diesel particulate matter (DPM) levels as the Port continues its decarbonization plans, as California Air Resources Board diesel emission-reduction programs take hold on transportation corridors within the Oxnard/Port of Hueneme community and through the Central Coast transit route of the 101 Freeway. This will lead to additional data-driven outcomes (see below).
12. The BC data and its relationship with $PM_{2.5}$ is novel. We will analyze the data and communicate our findings to the scientific community through CSUCI student intern presentations at professional conferences and publication in technical journals. Technical presentation of this data will solidify its credibility to elected officials and regulatory boards.

13. Final project results will be presented in public meetings to community groups, City Councils, County Supervisors, the California Air Resources Board, and others. Following review of draft final report by CAC and TAC, a final project report, along with future plans and implementation, will be submitted to EPA.

The expected outcomes, which range in change in knowledge, behavior and local conditions, include:

1. Since the current particulate matter standards are based solely on size and gravimetric measurements, we have only limited information to derive insight into particle composition. The primary emission concerns in this community currently focus on DPM emissions and associated soot accumulation. Therefore, this program will provide community-wide information on the concentration and distribution of BC as a surrogate for DPM.
2. A supplemental outcome will be measurements of biomass carbon/brown carbon during wildfire episodes that have become all too common in the Western states. In recent years particulate concentrations during wildfires have reached extreme levels which poses a risk to outdoor workers, especially farm workers. This project's data could complement local public health messaging to the local farmworker community, including indigenous populations who speak neither Spanish or English, who work in the farmlands adjacent to and in the target communities of Oxnard/Port Hueneme.
3. Public outreach through local radio and television programs (including radio programs for the indigenous language community) will increase knowledge and understanding of the health and exposure concerns from transportation and wildfire-related emissions.
4. Communication efforts will inform key local and state decision makers on the exposure concerns of this community that bears a disproportionate share of respiratory impacts and health burdens.
5. The best policy choices are always data driven. It is expected that the BC concentration data, including information on the increment exposures along logistics corridors, will inform decisions at local, state, and federal levels. The importance of exposure reduction will direct further efforts at medium and heavy-duty vehicle emissions reduction with electrification through battery-electric and fuel-cell powertrains. It is our hope that one outcome will be accelerated adoption of zero-emission trucking and infrastructure.
6. Through public outreach efforts and outputs described above, an informed and engaged public will emerge to advocate for environmental and health improvements.
7. Student engagement through affiliation with the CSUCI, will provide opportunities for internships at the Port, career development, and links to the community where the students live. CSUCI has a high proportion of students commuting from the Oxnard/Port Hueneme area.

B. Performance Measures and Plan

The Oxnard Harbor District is committed to completing the project by the three-year deadline (end of 2025). The performance measures will be meeting the schedules set on the timeline in this narrative and ensuring the outputs and outcomes become a reality. This will be achieved through project status, open communication throughout the project, and the final report provided to EPA at the end of the project.

As a short-term goal, the project manager will work with the subrecipients to start and complete the project on time. The project manager will coordinate an initial/kick-off meeting with each subrecipient to discuss grant program requirements, project status, budget and schedule. The project manager will ensure contract is in place to order the equipment and supplies listed in the budget table and ensure the monitoring stations are installed. The project manager will track expenses charged to the program and

review the invoice charges prior to final approval. To check on progress, the project manager will communicate on a regular basis to discuss project status and reimbursement requests. A community manager will be assigned to ensure the community outreach expectations are met throughout the duration of the project. The community manager will work closely with the project partners, TAC and CAC.

As a long-term goal, progress on meeting these performance measures will be reported in quarterly reports submitted to EPA. Final project results will be presented in public meetings to community groups, City Councils, County Supervisors, the California Air Resources Board, and others. Following review of draft final report by CAC and TAC, a final project report, along with future plans and implementation, will be submitted to EPA.

C. Project Timeline and Milestones

The table below summarizes the 3-year timeline for the project. It is understood that the project will continue to provide real time data after the initial 3 years, but there will be no additional funds from this grant application to continue to operate the equipment beyond the 3-year timeframe.

Year	Task No.	Description	Schedule
		Notice to Proceed	December 2022
1		Capacity building and needs assessment; equipment procurement	Q1-Q4 2023
1	1	Project kickoff meeting with Technical Advisory Committee (TAC)	Q1 2023
1	2	Purchase air monitoring devices	Q1 2023
1	3	Contract air quality monitoring data collection and technical services	Q1 2023
1	4	Establish Community Advisory Council (CAC)	Q2 2023
1	5	Review locations with CAC and TAC	Q3-Q4 2023
1	6	Finalize locations for air monitoring systems	Q4 2023
2		Outreach, data collection, and continuous engagement	Q1-Q4 2024
2	1	Install monitoring devices	Q1-Q2 2024
2	2	Collect first 3 months of data	Q3 2024
2	3	CAC, TAC and other community meetings to identify opportunities for continuous engagement	Q1-Q4 2024
2	4	Collaborate in media creation and distribution of educational outreach materials	Q1-Q4 2024
2	5	Analyze data in collaboration with CSUCI students	Q3 24 – Q4 25
2	6	Present results to various groups and organizations	Q3 24 – Q4 25
3		Analysis, findings, recommendations, community presentations and final report	Q1-Q4 2025
3	1	Develop a website to show real-time data for public	Q1-Q3 2025
3	2	Draft final report, review with CAC and TAC	Q3-Q4 2025
3	3	Submit final report to EPA	Q4 2025

Section 5 Quality Assurance Statement – included as an attachment per RFA

Section 6 Programmatic Capability and Past Performance

A. Past Performance

The Port has been awarded and successfully implemented federal, state, and local grant funds with the Port staff providing grant management, administration, implementation, and compliance reporting. The Port project management system uses well-defined procedures for large monetary procurements and will use those procedures for managing schedule, budget, quality, and completeness for this Project. Below is a list of grants managed in recent years:

The Port was awarded $500,000 by U.S. EPA in conjunction with the 2014 DERA grants to improve air quality at ports (Grant# DE-83561801-0; CFDA#66.039). The project was for one transformer and switchgear for landside shore power connection. The project was successfully completed by 2016.

The Port was successful with a TIGER 2015 award from U.S. Department of Transportation MARAD, Port of Hueneme Intermodal Improvement Project. The TIGER grant provided funding for deepening of Berths 1 and 2, strengthening Wharf 1, modernizing cargo handling infrastructure, and extending on-dock rail. The project total cost of $24 million was awarded $12,300,000 and was successfully completed.

B. Reporting Requirements

The Port has been consistent in its quarterly reporting in past DERA grant funded projects and meeting the expected outputs and outcomes for past grants. The Port has successfully completed cooperative agreements in the past with approved final reports that were submitted on time. It has a long history of implementing successful government grant partnerships at the state and federal agency level.

C. Staff Expertise

The Port possesses the staff and contractor resources necessary to effectively implement this project. Giles Pettifor, Port of Hueneme Environmental Manager will manage the grant and be an integral part of the TAC. Miguel Rodriguez, Port of Hueneme Outreach Manager, will work closely with TAC and CAC to support the community aspect of this project. Their resumes, along with the other partner's resumes are included as Attachment A to this application. The Port has been awarded multiple grants from federal sources and have executed each of the grant funding in a timely and efficient manner.

Section 7 Budget

The budget table shows the budget detail for the $500,000 we are requesting from EPA to purchase and install 4 aethalometers with enclosures, meteorological stations and the appropriate computer tables and modems. The selected contractor will assemble, calibrate and install the equipment. Website integration and maintenance, along with three years of equipment operation and maintenance will be included in the contract agreement. The contractor will provide technical guidance for the location of the air monitoring equipment and support the project report required by the grant.

With the $25,000 budget, The Port will manage the project and ensure the project is completed in a timely manner and that the grant funds will be expended in an efficient manner. In addition, the Port will collaborate in media creation and distribution of educational outreach materials, design community service internships, and provide internships and manage the interns while working at the Port of Hueneme. With the $145,000 budget allotted to CFROG, it will assist with the creation of TAC and the recruitment and development of the CAC. CFROG will engage and educate the community in air quality throughout the 3-year project and also provide internships to students in the community awareness realm. CSUCI has budgeted $20,000 which will be used identify students to participate in both the technical and community service internships, present at conferences in California, and support project

report which may lead to research project and publication of a university paper. VACPD will support the TAC throughout the duration of the project by providing technical expertise and a $10,000 budget has been allotted to VACPD for the 3-year project duration.

Table: Budget Summary

Line Item and Itemized Cost	EPA Funding
Project manager @$80/hr, 100 total hours for 3-year project	$8,000
Project community manager @ $70/hr, 100 total hours for 3-year project	$7,000
2 Internships @ $5,000/intern	$10,000
TOTAL PERSONNEL	$25,000
Equipment – 4 aethalometers @ $25,000/unit	$100,000
4 enclosures @ $7,000/unit	$28,000
4 meteorological stations @ $2,000/unit	$8,000
TOTAL EQUIPMENT	$136,000
4 tablet computers @ $600/unit	$2,400
4 computer modems @ $300/unit	$1,200
TOTAL SUPPLIES	$3,600
Contractual - Support Services Contract, assembly, calibration, installation, website integration and maintenance, three years of O&M, and report	$160,400
TOTAL CONTRACTUAL	$160,400
Other – Subaward – CFROG	$145,000
Other – Subaward – CSUCI	$20,000
Other – Subaward – VCAPD	$10,000
TOTAL OTHER	$175,000
TOTAL FUNDING	**$500,000**
TOTAL PROJECT COST	**$500,000**

Attachments

Attachment A – Quality Assurance Statement
Attachment B – Resumes
Attachment C – Partnership Letters
Attachment D – Support Letters

Attachment A – Quality Assurance

Attachment B – Resumes

Attachment C – Partnership Letters

Attachment D – Support Letters

Ventura County Air Pollution Control District

4567 Telephone Rd
Ventura, California 93003

tel 805/303-4005
fax 805/456-7797
www.vcapcd.org

Dr. Laki Tisopulos, P.E.
Air Pollution Control Officer

March 16, 2022

Mr. Giles Pettifor
Environmental Manager
The Port of Hueneme
333 Ponoma Street
Port Hueneme, CA. 93041

Subject: Support for the Ventura County Air Quality Monitoring Project

Dear Mr. Pettifor,

I am writing to express my strong support for the Ventura County Air Quality Monitoring application which will be submitted to EPA's Enhanced Air Quality Monitoring for Communities.
The Port of Hueneme is partnering with the local air quality stakeholders including Ventura County Air Pollution Control District (VCAPCD), California State University Channel Islands (CSUCI), and Climate First: Replacing Oil & Gas (CFROG), a local community environmental advocacy group.

The project will provide funding to install several additional monitoring devices and expand the region's ambient monitoring capabilities throughout the underserved communities in Ventura County California that include the Cities of Oxnard and Port Hueneme. This much needed project will provide community-wide information on the concentration and distribution of black carbon as a surrogate for diesel exhaust which is of primary concern.

The Port seeks to prioritize environmental justice and ensure a comprehensive community approach, as it works to develop a new paradigm of community/Port partnership with a foundation of equity and opportunity spurred into the future with green technology as a foundation of a decarbonized, equitable future. The community organization partnerships and public outreach efforts will keep the public informed and engaged on air quality in our region. The project will also enable key local and state decision makers on the exposure concerns of this community that bears a disproportionate share of respiratory and health burdens. I applaud and fully support the Port of Hueneme and its partners for being proactive community leaders and continuing to engage our community in air quality awareness. If you have any questions regarding this matter, please feel free to contact me at (805) 303-4016.

Sincerely,

Dr. Laki Tisopulos, P.E.

Channel Islands
CALIFORNIA STATE UNIVERSITY

DIVISION OF ACADEMIC AFFAIRS

Mary Woo, PhD
Chemistry and Environmental Science
Lecturer
CSU Channel Islands
1 University Drive
Camarillo, CA 93012
Phone: (805) 451-4671
Email: mary.woo@csuci.edu

March 15, 2022

Mr. Giles Pettifor
Environmental Manager
The Port of Hueneme
333 Ponoma Str
Port Hueneme CA 93041

RE: Support for Ventura County California Community Air Quality Monitoring Network Project

Dear Mr. Pettifor,

I am writing to provide my full support as a project partner for the Ventura County California Community Air Quality Monitoring Network application that will be submitted to EPA's Enhanced Air Quality Monitoring for Communities Grant. The project will provide four monitoring devices installed throughout the underserved communities in Ventura County California and community-wide information on the concentration and distribution of black carbon (BC) as a surrogate for diesel exhaust which is of primary concern to the area.

California State University Channel Islands (CSUCI) is a four-year, public university in Camarillo, California. Established in 2002, we're the youngest of 23 campuses in the CSU family. As the only public four-year university in Ventura County, CSU Channel Islands serves as a unique institution in the region. Its economic and fiscal impacts benefit the economies of the local communities in Ventura and Santa Barbara counties, the region, and throughout the entire State. These impacts generate significant benefits in the form of increased employment, labor income and economic output.

The Environmental Science and Resource Management (ESRM) Program at California State University Channel Islands is designed to help students solve the planet's most pressing problems and forge a more sustainable path for our future. Our students gain a solid understanding of the environment from both scientific and human perspectives, learn from talented, dedicated faculty, and start making a difference through intensive academic, field-based research and volunteer opportunities.

ESRM will serve several roles in this overall project. First, we will identify and recruit students for the two paid internships. Second, we will manage the research activities of the student interns. Intern research activities will include analysis of the BC data and presentation of the data at scientific conferences and to local decision makers. Third, ESRM will work with the project partners and student interns to prepare manuscripts that utilize the collected BC data for publication in scholarly journals. Lastly, I will support the project by serving on the Technical Advisory Committee (TAC).

This much needed and important project will provide key air quality data to our local community to make policy decisions and improve agency in our underserved residents. We plan to be involved from the planning stages of the project, throughout the three-year EPA project duration, and past that term as we continue to build the necessary relationships and monitoring networks to tackle air pollution issues collectively.

Thank you for your consideration.
Sincerely,
Mary Woo

March 11, 2022

Mr. Giles Pettifor
Environmental Manager
The Port of Hueneme
333 Ponoma Str
Port Hueneme CA 93041

RE: Support for Ventura County Air Quality Monitoring Project

Dear Mr. Pettifor,

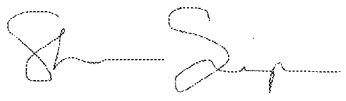
I am writing to provide my full support as project partner for the Ventura County Air Quality Monitoring application which will be submitted to EPA's Enhanced Air Quality Monitoring for Communities. The project will provide four (4) air monitoring stations installed throughout underserved communities in Ventura County California and will provide community-wide information on the concentration and distribution of black carbon as a surrogate for diesel particulate matter emissions which is of primary concern to the region.

Climate First: Replacing Oil & Gas (CFROG) is a local environmental advocacy group that focuses on protecting human health. We have a strong record of bringing scientific data and community members together to successfully advocate for the generation of informed environmental and industry policies. We plan to support this project by coordinating community engagement, and aiding with the formation of the Technical Advisory Committee (TAC) and Community Advisory Council (CAC). In addition, we plan to assist in presenting findings to decision makers, provide internships to local university student(s) and aid with community outreach.

This much needed and important project will provide key air quality data needed in our local community to make policy decisions and keep the Ventura community informed. We plan to be involved from the planning stages of the project, throughout the three-year EPA project duration, and past that term as we continue to engage the community and monitor the air quality for years to come.

Thank you for your consideration.

Sincerely,



Shannon Simpson

GILES PETTIFOR

Ex. 6 Personal Privacy (PP)

SUMMARY OF QUALIFICATIONS

Environmental professional with over 15 years of experience in water quality, stormwater management, water resources and NPDES permit compliance.

EXPERIENCE

Port of Hueneme, Environmental Manager, (2017 - Present) Port Hueneme, CA

- As the Port's Environmental Manager, Mr. Pettifor has oversight of the Port's active sustainability initiatives which include implementation of the Port's Environmental Management Framework (EMF), our Green Marine Certification, as well as compliance with ongoing state and Federal environmental regulations including air and water quality.
- The Port's EMF outlines the strategic efforts the Port will undertake to protect the environment, and covers eight environmental elements including:
    - 1. Community engagement
    - 2. Sustainability
    - 3. Air Quality
    - 4. Water Quality
    - 5. Soil and sediment
    - 6. Marine resources
    - 7. Energy management
    - 8. Climate change adaptation
- Since adopting this proactive agenda of sustainability, the Port has pursued the integration of the elements of the EMF into its daily operations as well as long term planning. Progress has been made every year since, and in 2016 the Port became the first port in California to be certified by Green Marine, the preeminent third party environmental certification organization for marine facilities. The Port is fully committed to making environmental progress in every way that it can as it grows and changes with the global economy.
- In addition, Mr. Pettifor is helping to lead the development of the Port's long-term energy planning, including the adoption of zero and near zero emission equipment at the Port and associated operational and logistical adjustments. Mr. Pettifor is also lead on the implementation of the Port's NPDES stormwater permit efforts in compliance with the California statewide Industrial General Permit.

Larry Walker Associates, Project Scientist II (2014 - Present) Ventura, CA

- LWA is a specialized water quality management consulting firm supporting municipal clients throughout California. In this role, I advise more than 20+ client Cities and Counties around the State and/or develop materials for their water-related programs and activities. Examples include:
    - NPDES Municipal Stormwater Permit compliance projects for both Phase I and II permittees, for which I develop efficient and effective solutions including creation of and revisions to program documentation (ROWDs, WQIPs, JRMPs, SWMPs, SWPPPs, ERPs) and annual reporting, public education and outreach material development and implementation, monitoring data assessment, and staff training.
    - Regulatory assistance including interpretation and consultation on potential outcomes of new State Water Resources Control Board and Regional Board policies, procedures and documents, and tracking and interpretation of upcoming legislation at both the Federal and State levels.
    - Formal policy tracking and commenting including comment letter development and submittal for both Federal and State policies including 303d lists, triennial reviews and integrated report development, statewide trash amendments, California Stormwater Initiative, industrial permit TMDL revisions, pesticide regulation changes, statewide bacteria policy, and statewide nutrient policy.
    - Water resources project support including salt and nutrient management plan development, assessment of options related to salt control from water softeners, recycled water program development and stakeholder

coordination, anti-degradation analyses of POTW construction and discharge modification, and SGMA related groundwater sustainability plan and agency tracking.
  - Development of Stormwater Resources Plans in compliance with State guidelines to enable pursuit of Proposition 1 grant funds.
  - Completed Proposition 1 Stormwater Implementation Project grant proposals for LID/GSI projects including submittal via State web portal (SMARTS) for clients which were then successfully funded.

King County, Water and Land Resources Division - Program Manager III - (2007 –2013) Seattle, WA

- Managed compliance with the Clean Water Act for Washington State's most populous county through efficient leadership and a deep understanding of both the regulatory environment and underlying science.
  - Oversaw King County's National Pollutant Discharge Elimination System (NPDES) Phase I Municipal Stormwater Permit program through maintaining a network of collaborative relationships with 11 County Departments, 30+ neighboring jurisdictions, Tribal Nations, and regulatory agency staff.
  - Ensured ongoing implementation of nearly 100 permit requirements throughout the County by pioneering new ideas, communicating and meeting deadlines, managing budgets, using judgment to prioritize and leverage resources and navigate political processes to ensure that the County's myriad programs and 13,000 employees were protecting water quality in compliance with our permit.
  - Co-led response to EPA compliance audit of entire stormwater management program, including 2-day site visit audit and 60+ requirement records request applicable to all of the County's staff and programs. Communicated the urgency and influenced other departments' participation in the audit.
  - Developed and instituted a system for tracking the ongoing completion of milestones and tasks required for compliance with permit by all of the County's departments down to the staff level to avoid risk by ensuring that critical path permit compliance work was completed.
  - Advised management on developing policy shifts in the State and Federal regulatory landscape by distilling the most pertinent content, its potential fiscal and procedural implications, and recommended responses.
  - Developed communication tools and led trainings and gave public presentations aimed at raising awareness about stormwater and the County's efforts to improve local water quality at public events, stakeholder and NGO group meetings throughout King County.
  - Conceived of and led development of a series of public education videos explaining in simple language what the permit was and why it matters to water quality, in response to low attendance at public meetings. Public participation in the stormwater program has increased annually since launching the videos in 2009.
- Collaborated with regional cities and counties to found a Puget Sound region-wide stormwater education and outreach campaign on how to protect water quality with simple behavior changes.
  - Co-wrote grant which secured $1MM in funding to develop the campaign and integrate social marketing techniques into design and marketing channel selection, build website and materials, and fund media buys.
  - Helped grow participation amongst neighboring jurisdictions to 40+ jurisdictions in two years through developing strong relationships with jurisdictions, regulatory agency staff and non-profits to achieve consistent messages that transcend jurisdictional borders and reach as widely as possible.
- Regional coordination leader for EPA grant- funded, water quality modeling project. Garnered matching funds from local jurisdictions, presented to cities in watershed and Muckleshoot Tribe on project concepts while soliciting input and data sharing, and presented to the watershed's salmon recovery forum of elected officials from local jurisdictions.
- Co-authored 5 State and Federal water quality and pollution prevention grants, on the topics of public education and outreach, stormwater system mapping, pollution source tracing and elimination, and low impact development (LID).

Triton Environmental Inc. — Project Manager, Coastal Projects Division (2004 – 2006) Guilford, CT

- Managed first-ever marine sediment sampling and characterization study in New England under new EPA/ National Marine Fisheries Service/ U.S. Army Corps regulations. Succeeded through translating between the client (budget/timing concerns), laboratory scientists (testing protocol details), and regulatory agencies (reporting/permitting). Coordinated permitting, sediment sampling, bathymetric surveying crews and toxicology lab subcontractor, and oversaw contractor dredging compliance by working on the dredging barge for three months.
- Managed regional projects including: oil spill prevention and response documentation and planning, coastal permitting for residential and industrial clients, marine dredging permitting.

MIGUEL RODRIGUEZ

Ex. 6 Personal Privacy (PP)

SUMMARY

Strengths: Excellent bilingual verbal and written communication skills, prompt and accurate service. Ability to identify risk factors within families, political structures and their environments, analyze problems, understand needs and provide solutions. Works well both independently and as a part of a team in a deadline driven, fast-paced environment. Clear and effective computer literacy in Internet-based social media, grant seeking/writing, preparing and delivering professional presentations to large and small audiences. Proven and recognized leadership in the private and public sectors.

WORK EXPERIENCE

Community Outreach Manager PORT OF HUENEME OXNARD HARBOR DISTRICT, Port Hueneme, CA August 2019-present
Started the Community Relations Department for the Port of Hueneme, which is a top 10 Port in the US for the import and export of vehicles and bananas as well as heavy equipment. The Port has been having environmental community issues as it is projecting to expand in the next five years. Using community organizing and agency outreach experience acquired throughout the last 10 years I am building coalitions of stakeholders, helping draft the Port's Clean Air Plan, as well as handle a magnitude of community outreach events. I am developing messaging around "Building community around the port, not building the port around the community". Also developing intentional relationships with key customers and agencies to promote Port of Hueneme business and visibility. Directing two outreach employees and collaborating with upper management and colleges to create internships for graduates at the Port. Managing a $330,000 budget for community and non-profit sponsorships, as well as social capital building enterprises. Created the Feeding the Frontline covid-19 campaign which helped leverage the port's resources to purchase essential food and other items from street/swapmeet vendors as well as coordinate over 1.1 million lbs. of produce donations from port customer Del Monte fresh food to distribute to over 40,000 mostly farmworker families near the port. Created Mixteco Indigenous language media regarding Port's 10 year strategic plan and other projects.

Community Services Coordinator COUNTY OF VENTURA BEHAVIORAL HEALTH, Ventura, CA May 2016-August 2019
Helped design and implement an outreach program geared specifically at increasing the number of Medi-Cal eligible Latinos receiving Behavioral Health services by 15%. Collaborated with CSUN's Psychology Department in the creation of Psycho-educational materials to reduce mental health stigma in the Latino Community and promote self-efficacy. Helped craft program evaluation tools and procedures as well as conducted and supervised 3 field workers/researchers in community specific data gathering to inform the program and help create a "best practices" designation for future research investigations by CSUN. Designed a rural community specific outreach pilot program which was selected as a countywide Process Improvement Program (PIP). Program was expanded by $1.5 million and 8 outreach positions were created as a result of the success of the PIP. Also presented on Latino Outreach Strategies at the National Latino Mental Health Conference in San Gabriel California in May of 2019.

Community Organizer CAUSE, Ventura, CA www.CAUSEnow.org June 2010- May 2016

Grants Awarded 2011-2016:

Kaiser Permanente Woodland Hills Service Center Community Benefits Grant
$60,000
Social Justice Fund
$7,500, $10,000
Kaiser Permanente Community Partner Grant
$23,400 for 3 consecutive years
County of Ventura Community Transformation Grant
$8,800 for two years
Case Study for Center for Disease Control
$8,000
City of Ventura Community Development Block Grant
$10,000

Completed Projects

2015-2016

- Trained 40 grassroots leaders to advocate on behalf of increasing affordable housing in the City of Ventura around two projects 1) Housing Authority Westview Project (300 units) Both projects passed various committees and have received Ventura City Council approval.
- 2) Ashkar project (200 units)
- Coordinated outreach and data collection efforts for a Farm worker overtime ordinance in the Ventura County Region report (available now at CAUSENOW.org)
- Coordinated West Ventura outreach for Gold Coast Transit's launch of new campaign "Go Ventura"

2014

- Helped draft a flexible Inclusionary Housing Ordinance for the City of Ventura
- Built grassroots coalition to propose Pro-Affordable Housing Agenda
- Wrote and acquired Kaiser Permanente Woodland Hills service center Community Benefits Program Grant
- Advocated for Charter reform of elections within the City of Ventura synchronizing off year elections to national calendar
- Trained and organized low income youth to become precinct captains to promote even year elections (passed 80% of the vote)
- Advocated for the restriping of crosswalks in the City of Santa Paula (restriping occurred Aug. 2014)

2013

- Organized City Candidate Forum with Affordable Housing as leading issue (230 attendees)
- Completion of land acquisition for community park through public/private partnership
- Organized 30 participants to attend ACLU Conference and Lobby day in Sacramento.
- Developed and implemented Youth-Led research project with an emphasis on activism and policy development.
- Increased Latino participation in land use decisions and city planning processes for community redevelopment plan.
- Developed model vehicle for the implementation of Kaiser Healthy Eating Active Living (HEAL) zone with participation from various community groups, County Public Health, and School District.
- Collaborated with local Unions to help bridge labor and community interaction.
- Organized the City of Ventura's first Affordable Housing Alliance to preserve the Inclusionary Housing Ordinance.

2012

- Organized community members to testify before the Redistricting Commission on behalf of maps drawn by CAUSE. Maps were accepted by the Commission.
- Secured property for park in low income neighborhood through public/private partnerships between the City and the Trust for Public Land.
- Outreached to new and occasional voters in educational campaigns for California State budget reform.
- Developed a Case study for County of Ventura Public Health on community transformation strategies that can be replicated through community organizing.
- Conducted Policy/Environmental Scan for 10 cities in County of Ventura for Public Transportation, park access, alcohol density ordinances.
- Directed a 5 day Youth Leadership camp for 88 teens from 3 different counties.
- Implemented campaign for local sourcing of fruits and vegetables in schools in an agricultural community for long term employment of community members and increased sustainability of food systems.

2011

- Incorporated park overlay in established redevelopment area
- Arranged volunteer precinct walking, built relationships with Elected Officials, organized highest attended political forums.
- Hired and supervised a phone bank with 20+ paid phonebankers/canvassers which reached 40,000 voters over the phone and 1500 voters at home in a 3 week period.
- Directed first ever patch-through direct lobbying phone campaign to shut down non-compliant Assembly member's office.
- Organized successful campaign against public library privatization.
- Organized successful coalition to stop the annexation of unincorporated county land for publicly funded private development.
- Stopped the City of Ventura from taking $1 Million in public pool funds to pay for fiscal reports on undeveloped private property.

LAKI T. TISOPULOS, Ph.D., P.E.
Ventura County Air Pollution Control District — VCAPCD, Ventura, CA
Phone: (805) 303-4016 — E-mail: laki@vcapcd.org

Education

Ph.D., Chemical Engineering	University of Southern California, February
M.S., Chemical Engineering	University of Southern California, May
B.S., Chemical Engineering	Technical University of Istanbul, August

Professional Appointments

09/19 – Present	Executive Officer – Ventura County Air Pollution Control District
06/16 – 08/19	Deputy Executive Officer – South Coast Air Quality Management District (SCAQMD), Office of Engineering & Permitting
02/14 – 06/16	Assistant Deputy Executive Officer - SCAQMD, Office of Science & Technology Advancement, Monitoring & Analysis
09/01- 02/14	Assistant Deputy Executive Officer - SCAQMD, Office of Planning, Rule Development and Area Sources
11/97 – 09/01	Manager - SCAQMD, Office of Planning, Rule Development and Area Sources
12/93 – 11/97	Manager – SCAQMD, Office of Planning, Transportation, and Information Management
1/90 – 12/93	Air Quality Analysis & Compliance Supervisor - SCAQMD, Office of Stationary Source Compliance
10/88 – 1/90	Air Quality Engineer II - SCAQMD, Office of Planning and Rules
2/88 – 10/88	Air Quality Engineer I - SCAQMD, Engineering Division

Honors

Professional Engineer, Chemical Engineering, Certificate No. CH 4793
Vice President, California Air Pollution Control Officers Association (CAPCOA) Board of Directors, October 2021 to present
Chair, Legislative Committee, CAPCOA, October 2021 to present
Executive Committee Member, CAPCOA, October 2020 to present
Chair, CAPCOA Mediums Districts, September 2019 to October 2021
Chair, CAPCOA Finance Committee, October 2020 to October 2021
E.R. Dick Davis Award (A&WMA), 2019
U.S. State Department Invitee, Presented on Fugitive Dust Control Strategies in New Delhi, India, March 2019
S. Smith Griswold Outstanding Air Pollution Control Official Award (A&WMA), 2016
U.S. State Department Invitee, Presented on air quality matters in four major cities in North India, May 2016
Vice President, A&WMA, 2013
Board Director, A&WMA, January 2011 to January 2014

- Chair, A&WMA Governance Committee, January 2012 to January 2014
- Member, A&WMA Finance Committee, January 2012 to January 2014

Chair, A&WMA, West Coast Section, January 2008 to December 2009
Vice Chair, A&WMA, West Coast Section, January 2005 to December 2007
Board Member, A&WMA, West Coast Section, January 2003 to January 2014
Member, A&WMA, 2003 to present
Member, City of Claremont Sustainability Committee, January 2008 to January 2012
Member, City of Claremont Sustainability Task Force, 2007 to 2008
Clinton Administration, Presidential Excellence and Leadership Award (Project XL), 1997
SCAQMD Most Adaptive Team, 1996
SCAQMD Manager of the Year, 1995

Publications (selected)

The Challenges and Benefits of Improving Air Quality in a Major Metropolitan Area: The Los Angeles Experience." L. T. Tisopulos, 8th International Air Quality Conference Proceedings, Athens, Greece, March 2012

"The Challenges of Reducing SOx Emissions from RECLAIM Sources in the South Coast Air Basin." L. T. Tisopulos, J. Cassmassi, G. Quinn, K. Orellana, A&WMA Proceedings, Orlando, June 2011

"Advanced Monitoring Technologies – The Next Frontier"
Laki Tisopulos, A&WMA Ontario Section, Ontario, Canada, October 2016

"Quantification of Fugitive Emissions from Large Refineries Using Optical Remote Sensing Methods"
Laki Tisopulos, Andrea Polidori, Olga Pikelnaya, Johan Mellqvist, Jerker Samuelsson, Marianne Ericsson, Rod Robinson, Fabrizio Innocenti, Ram Hashmonay, Gilad Shpitzer, A&WMA Proceedings, Long Beach, March 2016

"The Challenges of Reducing Particulate Matter and Ammonia Emissions from Fluid Catalytic Cracking Units in the South Coast Air Basin." L.T. Tisopulos, M. Pham, E. Muehlbacher, M. Garibay, A&WMA Proceedings, Orlando, June 2011

"The Challenges of Reducing PM2.5 and Ozone Exposure Levels in the South Coast Air Basin."
L. T. Tisopulos, J. Cassmassi, A&WMA Proceedings, Calgary, Canada, June 2010

Nitrate Artifacts During PM2.5 Sampling in the South Coast Air Basin of California
B.M.Kim, J.C. Lester, L.T. Tisopulos and M. Zeldin Journal of the Air and Waste Management Association, 49, pp. PM142-153, September 1999

"The Application of a Geographical Information System Technique in Calculating Spatial PM2.5 Area Source Emissions."
M.R. Woods, M.P. Laybourn, J.C. Lester, L.T. Tisopulos and R. Wu Proceedings of the AWMA Specialty Conference - PM2.5: A Fine Particle Standard, January 1999"

"Speciated Linear Rollback Model as a Tool in Assessing PM2.5 Precursor Control Effectiveness." B. M. Kim, J.C. Lester, L.T. Tisopulos and M. Zeldin, Proceedings of the 90th AWMA Meeting (98-WA 58.01), June 1998

"Coating Regulations: The SCAQMD Perspective"
SSPC Proceedings, November 1991

"A Local Response to Control Air Emissions from Foam Products."
Nation's Cities Weekly, July 29, 1991.

Ph.D. Thesis: Dynamic Behavior of the Electrochemical Anodization of Cu in H3PO4 Solutions; Electrochemical and Surface Spectroscopic Studies.
L. T. Tisopulos, U.S.C. Publications, January 1988.
Supervised by Dr. T. T. Tsotsis and Dr. I. A. Webster.

"Reaction Rate Oscillations During the Electrochemical Anodization of Cu in H3PO4 Solutions; XPS and SEM Studies." L. T. Tisopulos, I. A. Webster and T. T. Tsotsis, Journal of Surface Science, Vol 173 (1988), Page 145.

"Surface Investigations of Electrochemical Reaction Dynamics; The Cu/H3PO4 System."
L. T. Tisopulos, I. A. Webster and T. T. Tsotsis, A.I.Ch.E. Proceedings, New York, November 1987, paper No. 22b.

"An Ellipsometric Investigation of Reaction Rate Oscillations During the Electrochemical Anodization of Cu in H3PO4 Solutions. Some Preliminary Results."
L. T. Tisopulos, T. T. Tsotsis and I. A. Webster, Journal of Surface Science, Vol. 191 (1987), Page 225.

"An Ellipsometric Investigation of Reaction Rate Oscillations During H2 Oxidation on Ni."
L. T. Tisopulos and T. T. Tsotsis, Journal of Surface Science, Vol. 187 (1987), Page 165.

SAMUEL MICHIE

Ex. 6 Personal Privacy (PP)

Bring my education and senior-level air quality experience to continue to grow in my environmental air quality career. Focus on new technology, local air quality issues, and analysis of air quality data. Gather the most accurate data for air quality attainment designation decisions and public health messaging. Be a strong leader and role model with concise goals and expectations to encourage growth and team-oriented success.

EXPERIENCE

OCTOBER 2019 – PRESENT

SUPERVISING AIR QUALITY INSTRUMENT TECHNICIAN, VENTURA COUNTY APCD

Provide direction to my colleagues in the field operations of the ambient air monitoring network. Maintain the air monitoring network shelters and equipment. Perform all federal and state required QA/QC critical criteria including, but not limited to: calibrations, flow rate verifications, data analysis/review, and validation. Ensure the highest quality data is recorded and made available to the public. Limit downtime from instrument malfunction.

- Supervise and schedule staff and contractors during shelter maintenance/upgrade projects
- Research, justify, procure and supervise the installation of new air monitoring instruments/software
- Oversee and schedule field operations and upgrades
- Maintain a laboratory system for acceptance testing and certification of equipment prior to field deployment
- Stay up to date with new air quality instrumentation and techniques to modernize the VCAPCD air monitoring network
- Plan, oversee and coordinate all major field projects and upgrades
- Manage a clear and concise budget to meet department needs
- Participate in multiple state/federal conferences and committees, ensuring the District's active involvement

SEPTEMBER 2017 – OCTOBER 2019

PRINCIPAL ENVIRONMENTAL SPECIALIST, SOUTHERN CALIFORNIA GAS COMPANY

Field environmental manager and representative for one of the country's top 25 largest natural gas storage facilities. Honor Rancho is an approximately 600-acre depleted oilfield repurposed as a natural gas storage facility in Los Angeles County, California with a natural gas storage capacity of approximately 26 billion cubic feet. I was responsible for all air quality testing, inspections, instrumentation, record keeping, State/Federal/Local (SCAQMD) regulatory reporting, CEMs operation, and technical oversite. Honor Ranch facility utilizes approximately 30,000 horsepower of compression from internal combustion engines. Honor Rancho holds a federal Title V air quality permit and is also considered a major source of NOx emissions and a participant in the SCAQMD RECLAIM program. I was also responsible for project oversight of the CARB Oil and Gas Rule implementation for the facility. The requirements of the rule require

a robust Leak Detection and Repair Program (LDAR), compressor blowby measurements, and a network of advanced ambient air and metrological monitoring of the fence line for methane.

JUNE 2013 – SEPTEMBER 2017

AIR MONITORING SPECIALIST III, SANTA BARBARA COUNTY APCD

I was actively involved in all aspects of the Santa Barbara County Air Monitoring program. I ran multiple air monitoring sites, meeting or exceeding all standard QA/QC requirements. Additionally, I advanced quickly to a journeyman level of operation and troubleshooting of instrumentation, including telecommunication and cybersecurity components. I was a leader routinely supervising and teaching colleague's new air monitoring systems and troubleshooting techniques. I was responsible for the highest level of data review and submission of the data to EPA's national AQS database. I was responsible for updating air quality exceedances on the District website and accountable for publishing an annual air quality report presented to SBCAPCD's Board. I accomplished several large-scale improvements for the District air monitoring division, including an upgrade to the latest PC-based data loggers and direct polling of particle instruments. I represented the District at over a dozen state and federal conferences and regularly contributed to several professional committees.

FEBRUARY 2012 – JUNE 2013

AIR QUALITY SPECIALIST, INTERACT PMTI

Primarily consulted for the upstream oil and gas industry with an emphasis on Ventura County. I worked on VCAPCD permit applications, Emissions inventories, and other compliance activities. I was also involved in non-air quality projects such as the DOGGR area of reviews for new and existing wells. Additionally, I also worked on land-use planning applications for new projects and CEQA reviews.

MARCH 2010 – FEBRUARY 2012

AIR QUALITY SCIENTIST/ENGINEER, HORIZON AIR MEASUREMENT

I started as a field technician for a local air emissions testing company called Horizon Air Measurement. I was quickly promoted to a project manager position, overseeing Emissions testing from the following sources: Utility power plants, Boilers, Internal combustion engines, Gas turbines, Thermal oxidizers, Landfill gas flares, Municipal waste facilities, Mining processes.

EDUCATION

DECEMBER 2009

BS ECONOMICS (FOCUS ON ENVIRONMENTAL MANAGEMENT AND POLICY), UNIVERSITY OF MAINE

GPA: 3.70

Select Coursework: Intermediate Microeconomics; Intermediate Macroeconomics; Applied Data Analysis; Fundamentals of Mathematical Economics; Principles of Statistical Inference; Introduction to Natural Resource Economics and Policy; Econometrics; Economic and Policy Applications of GIS; Environmental Management Regulation and Policy; Environmental Protection and Law; Land Use Planning, Waste Management, Environmental Biology

-Ruttilus Allen Harrison Scholarship (Highest Ranking Junior in the School of Economics), Spring 2008

-Nauman Scholarship, Spring 2008

MSc., Atmospheric Science, University of British Columbia, 1999
B.S., Environmental Engineering, Pennsylvania State University, 1997

SUMMARY

Mr. Torcolini is the lead for the Western Air Quality Group in the Environmental Planning & Restoration Division of Leidos, Inc. in San Diego, CA. Mr. Torcolini is responsible for management of ongoing air quality and meteorological monitoring services within the Division. Mr. Torcolini has over 21 years of air quality and meteorological consulting experience and expertise in field of ambient air quality and meteorological monitoring. He has been supporting clients for the past 21 years, most recently as program manager for the Port of Hueneme air monitoring program as well as the Ports of Los Angeles and Long Beach air monitoring networks. Mr. Torcolini developed/implemented air quality and meteorological monitoring programs for utility clients (e.g. - SDG&E, Duke Energy, CPS Energy, and South California Edison). He also has expertise in air dispersion modeling and health risk assessment under NEPA and CEQA, and air quality data analysis and QA/QC protocols.

PROFESSIONAL EXPERIENCE

Leidos, Inc. (formerly SAIC) **(2001-Present)**

Senior Program Manager

- *Port of Hueneme Air Quality Monitoring Program - Program Manager*: Since 2019, Leidos has provided the Port of Hueneme (POH) with air quality monitoring services and leads the Leidos team providing this project work. Mr. Torcolini's primary responsibilities include air monitoring station design, installation/implementation, project management, budget adherence, and technical oversight. The Port of Hueneme's air quality station is located at the Art Haycox Elementary School nearby the Port complex and designed to monitor particulate matter (e.g. - PM_{10}, $PM_{2.5}$, PM_1 and black carbon). The monitoring station consists of one (1) API-Teledyne T640 particulate matter monitor and one (1) Magee Scientific AE-33 black carbon (BC) aethalometer. Mr. Torcolini's team provides oversight for day-to-day operational management of the monitoring and performs all data collection, management and QA/QC implementation on this project.
- *Port of Los Angeles Air Quality Monitoring Program - Program Manager*: Since 2005, SAIC/Leidos has provided the Port of Los Angeles with air quality monitoring services and Mr. Torcolini leads the Leidos team which is under contract to provide these services through April 2024. Mr. Torcolini has been involved in this program since its inception and responsibilities include network design/implementation, project management, budget adherence, scheduling, technical oversight, program outreach and customer care under this contract. The Port's air quality monitoring program features four real-time stations designed to monitor air pollutant (CO, SO_2, NO_X, O_3, PM_{10}, $PM_{2.5}$, UFP and BC) and meteorological parameters in the communities adjacent to the POLA facility. In the Port of Los Angeles' monitoring program, Mr. Torcolini has installed and maintained a total of four (4) Magee Scientific AE-33 aethalometers since 2013. Mr. Torcolini provides oversight for day-to-day operational management of the monitoring network and all subcontractors on this project.
- *Port of Long Beach Air Quality Monitoring Program - Program Manager*: Since 2006, SAIC/Leidos has provided the Port of Long Beach with air quality monitoring services and Mr. Torcolini leads the Leidos team which is under contract to provide this project work through calendar year 2024. Responsibilities include network design/implementation, project management, budget adherence, scheduling and staffing, technical oversight, program outreach and customer care under this $800K contract. The Port of Long Beach's air quality two-station network is designed to monitor air pollutant (CO, SO_2, NO_X, O_3, PM_{10}, $PM_{2.5}$ and BC) and meteorological parameters in the communities adjacent

to the POLB facility. In the Port of Long Beach's monitoring program, Mr. Torcolini has installed and maintained a total of two (2) Magee Scientific AE-33 aethalometers since 2012.

- *San Diego Gas & Electric (SDG&E) - Air Quality Monitoring Technical Services - Program Manager:* Mr. Torcolini is providing SDG&E with technical services on their eighteen (18) station particulate matter monitoring network at SDG&E facilities throughout San Diego County. Project responsibilities include initial station deployment and regularly scheduled maintenance (monthly, quarterly, annual and bi-annual) for SDG&E's eighteen (18) Met One NPM3 nephelometers. Mr. Torcolini is working with a variety of SDG&E stakeholders (wildfire operations, health and safety, and environmental staff) to provide these services through April 2023.
- *Duke Energy Solar Irradiance Monitoring Program - Program Manager*: Mr. Torcolini led the Leidos team that was tasked with siting, designing and installing fifteen (15) solar irradiance (SI) monitoring stations at Duke Energy substations across North and South Carolina. Mr. Torcolini led the team's involvement in this project from inception, performing the solar siting within the substations, developing the data communications architecture, installing the SI monitoring stations, and quality assurance of both the monitoring techniques and incoming solar radiation dataset. This project demonstrated how real-time SI data enhances solar resource forecasts through tailored statistical analysis. The SI data collected in this network is currently used by five (5) operational sections of Duke Energy operations. Duke Energy is considering an expansion of their SI monitoring network across their Florida service territory.
- *CPS Energy Air Quality Monitoring Network Design and Installation - Program Manager*: Mr. Torcolini led the Leidos team to assist CPS Energy in the design and installation of a 12-station air quality monitoring network across CPS Energy's service territory in San Antonio, TX. Mr. Torcolini developed a preliminary assessment study with several low-cost (e.g. - electrochemical sensors) air quality monitoring sensors to determine instrument performance, selected the appropriate air quality instrument(s), define the communications architecture, connect to CPS's Silver Springs Network (SSN) communications network and subsequently deploy the 12-node solution. Pollutants monitored in CPS's monitoring network are O_3, NO_2, NO, VOCs, PM_{10} and $PM_{2.5}$ at 5-mintue and 1-hour temporal resolution.

PUBLICATIONS

- Torcolini, J.C., Bertolin, G.E., Tomley, H., Watanabe, J., Wunder, L., and Spencer, R. 2014: Elemental and Organic Carbon Study at the Ports of Los Angeles and Long Beach. *Air & Waste Management Association's (AWMA) 107th Annual Conference and Exhibition.* June 2014.
- Torcolini, J.C., Bertolin, G.E., Weaver, M.S., Patton, C., and Wunder, L. 2010: The Influence of Local-Scale Meteorology on $PM_{2.5}$ Concentrations in a Coastal Environment. *AWMA's Symposium on Air Quality Measurement Methods and Technology.* November 2010.
- Bertolin, G.E., Torcolini, J.C., Weaver, M.S., Patton, C., and Wunder, L. 2010: Real World Performance of Beta Attenuation Monitors in an Extreme Environment. *AWMA's Symposium on Air Quality Measurement Methods and Technology.* November 2010.
- Allwine, K.J. and Torcolini, J.C. 2001: Perfluorocarbon Tracer Experiments in the Salt Lake City Basin during VTMX 2000. *International Symposium on Environmental Hydraulics* (Special Session on Urban Fluid Dynamics). May 2001.
- Allwine, K.J. and Torcolini, J.C. 2001: Measured Surface Temperature Distribution Across an Urban Area. *International Symposium on Environmental Hydraulics* (Special Session on Urban Fluid Dynamics). May 2001.
- Fast, J.D., Torcolini, J.C., and Allwine, K.J. 2000: Tropopause Folds & Subsequent Mixing of Ozone over the Northwestern United States during the Spring of 2000. *AMS Atmospheric Chemistry Symposium*. January 2001.

SHANNON L. SIMPSON

Affecting policy and behavior change to tackle our most pressing environmental challenges

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C: Ex. 6 Personal Privacy (PP)

Experienced professional facilitating environmental solutions: Twenty years leading efforts to build, implement, adapt, and grow environmental initiatives to help organizations meet desired mission-driven outcomes. Recognized for my adaptive management style, focus on building connections and awareness, analytical mindset, resourcefulness, outstanding ability to cultivate relationships, and skilled diplomacy.

EXPERIENCE

CLIMATE FIRST: REPLACING OIL & GAS (CFROG) November 2021 - Present
Executive Director Ventura, CA

GROWING GARDENS July 2020 – September 2021
Operations Manager Boulder, CO

- Oversaw all aspects of day-to-day operations including financial transactions, HR, and logistics for this local NGO – focused on building community through sustainable and regenerative agriculture.
- Maintained and enhanced key partnerships with foundations and funders through logistical support and relationship development
- Lead policy development and structuring of the community garden program, implement phased changes to improve efficiency and effectiveness of the program, and improve conflict management to create positive shifts in the culture of our seven community gardens.
- Integrated social justice, equity, diversity, and inclusion principles into program operations to improve access to locally grown produce and healthy cooking including a large food assistance program.
- In coordination with the Growing Gardens' team I communicated knowledge of sustainable and climate smart growing practices and principles to constituents including donors, stakeholders, and program participants.

ROOT DYNAMIC, LLC Feb 2019 – Present
Founder Boulder, CO

- Created new business venture to consult on foundational operations systems and processes as well as team dynamics to support mission driven organizations in achieving desired results.
- Provided policy expertise to a start-up cycling awareness initiative.
- Provided guidance on operational planning and implementation for a local personal health and well-being practice.

UNIVERSITY OF COLORADO – BOULDER Nov 2015 – Jan 2019
Assistant Director for Programs, Masters of the Environment (MENV) Program Boulder, CO

- Co-designed this brand new professional master's degree program including program direction, structure, growth, new initiatives, and curriculum development providing a non-traditional approach to graduate education. This brought an expanded type of student to CU Boulder (welcomed 73 new students in only its third year), helped to meet employment needs in the field, and developed innovative community partnerships.
- Initiated and facilitated evaluation of and improvements to the program including strengthening team dynamics as the staff tripled in size and designed program assessments to serve our students better and reduce attrition.
- Directed operations including building and supervising a team of four staff, creating policy and process infrastructure customized for the unique needs of the program, and fostering partnerships on and off campus.
- Taught two courses designed to build and improve professional skills such as project management and relationship building in our students and guide them through development and implementation of their capstone projects.

NOAA NATIONAL CORAL REEF CONSERVATION PROGRAM (CRCP) Feb 2005 – Nov2015
Program Analyst Washington, DC

- Co-chaired U.S. Coral Reef Task Force Steering Committee. Directed strategic planning, planned and co-facilitated five business meetings, and fostered collaboration to meet Task Force goals and objectives, resulting in interagency and local stakeholder action to restore three watersheds, and increased resilience of and reduced physical impacts to U.S coral reefs from climate change and other major stressors.
- Led the drafting of an Administration bill to reauthorize Coral Reef Conservation Act of 2000; influenced policy discussions to include regulatory tools and reduce barriers to passage; coordinated NOAA, Department of Commerce, the Administration, Congress, industry, academia, and NGOs in this process.
- Developed reports and policy briefings in response to time sensitive congressional and Administration requests, drafted congressional testimony and conducted congressional outreach.

- Oversaw execution of our $26 million budget through grants and internal agency transfers spanning 20 offices and 70 project managers.

SUSTAINABILITY INSTITUTE May 2002 – May 2003
Sustainability Coordinator Charleston, SC

- Assisted with creation of a model of sustainable building for a local community leading to greater understanding of sustainable practices such as native landscaping, low VOC paints, recycled material for insulation and decking, tankless water heaters, and rain cisterns as well as methods for energy efficiency, mixed use, community place making, and neighborhood walkability.
- Coordinated community/neighborhood outreach efforts, prepared correspondence, organized volunteers, researched and developed education materials, and delivered presentations to community members resulting in increased local awareness and support of sustainable building, living, and household practices.

NORTH CAROLINA DEPARTMENT OF TRANSPORTATION (NCDOT) Jan 1998 – July 2001
Natural Systems Specialist Raleigh, NC

- Managed State and Federal environmental regulatory compliance phase of state government transportation projects increasing natural resource protection by negotiating with engineers and managing consultants to determine the best location and design for projects. Created and conducted technical training for my colleagues.
- Oversaw monitoring of wetland and stream mitigation projects through application of soil science and plant knowledge.

EDUCATION

Master of Science in Environmental Studies, Policy **2001 – 2003**
College of Charleston Charleston, SC

Bachelor of Science in Environmental Studies – Natural Resource Management Track **1992 – 1996**
University of North Carolina at Asheville Asheville, NC

Biography Steven D. Colomé

Steven D. Colomé, Sc.D. received his doctorate in Environmental Health Sciences from Harvard University, with an emphasis in air pollution control. He also earnedan S.B. degree in Biological Sciences (molecular biology) from Stanford University.

His research is in the areas of air pollution exposure, pollution control, epidemiology, and risk assessment. He has served on the faculties of the University of California campuses at Irvine and Los Angeles. At UCLA he was Deputy Director of the Particle Research Center and Supersite, a multi-center research project supported by the National Institutes of Health, U.S. Environmental Protection Agency (USEPA), and the Health Effects Institute.

Dr. Colomé has conducted original studies on exposure and health effects from ozone, nitrogen dioxide, carbon monoxide, particulate matter, VOCs, sulfur dioxide, sulfate,nitrate, particle-related metals, mutagenic compounds, and formaldehyde. He has authored multiple of peer-reviewed publications on pollutant exposures and health effects, has co-authored a highly respected book: "Health Effects of Fossil Fuel Burning" and is co-author of the "Indoor Air Pollution: An Introduction for Health Professionals" sponsored by USEPA, CPSC, and the American Medical and American Lung Associations.

In addition to original research, Dr. Colomé has worked to integrate and summarize the effects of air pollution exposure. He has advised the USEPA on health criteria documents for sulfur oxides and particulate matter, nitrogen dioxide, and carbon monoxide. He was a consultant to the EPA Science Advisory Board on ozone, served on the Expert Panel for the Health Effects Institute's reanalysis of particulate-matter epidemiology, and was appointed a member of the National Research Council/National Academy of Sciences Committees on carbon monoxide in cold climates and complex terrain, and on winter fuel oxygenates.

Dr. Colomé served for a decade as a member of the Technical Advisory Committee to the Air Pollution Control Officer of the South Coast Air Quality Management District. He has served on governmental committees of the National Institutes of Health, NASA and U.S. Department of Defense (DoD). The latter two dealing with astronaut exposures on the International Space Station and inhalation exposures of soldiers serving in Iraq. He has also consulted for the governments of Croatia and Mexico on environmental health and pollution exposure.

He is co-founder of Aromatica, a firm developing and manufacturing emission control and aroma capture equipment for the wine industry.

Dr. Colomé currently serves as the medical appointee for the Santa Barbara County APCD Hearing Board, sits on the Advisory Committee for the Ventura County APCD and served as the mayor's appointee to the City of Ojai Climate Emergency Mobilization Committee.

Mary Woo (Pack)

California State University Channel Islands
Environmental Science and Resource Management Program
Camarillo, CA 93012
mary.woo@csuci.edu | 805-451-4671

Education

2011	**University of California, Irvine** PhD / MS Earth System Science and Chemical Oceanography
2005	**University of California, Santa Barbara** BS Chemistry (Geology Minor)

Appointment History

2016-present	**California State University Channel Islands** Lecturer, Chemistry and Environmental Science and Resource Management
2016-2018	**California Lutheran University** Lecturer, Chemistry and Geological Sciences
2014-2015	**Cool Planet Energy Systems** Chemist and Laboratory Technician, Analytics Team
2011-2015	**Research Consultant – Multiple Clients** Consultant for Exxon Mobil, United States Geological Survey (USGS), National Oceanographic and Atmospheric Administration (NOAA) and University of California Irvine
2011	**University of California, Irvine** Postdoctoral Researcher with the Trumbore Carbon Cycle Lab

Publications *(five most relevant)*

2020-2022	Zimmer-Faust, AG, J Griffith, J Steele, L Asato, T Chiem, S Choi, A Diaz, J Guzman, M Padilla, J Quach-Cu, V Ruiz, B Santos, **M Woo**, and SB Weisberg. Under Review. Assessing cross-laboratory performance for quantifying coliphage using EPA Method 1642. Journal of Applied Microbiology. Brander, S, V Renick, M Foley, CS Steele, **M Woo**, A Lusher, S Carr, P Helm, C Box, S Cherniak, R Andrews, and C Rochman. *In Review*. Sampling and QA/QC, or how many blanks do I need?: A guide for scientists investigating the occurrence of microplastics across matrices. Applied Spectroscopy. Gaston, E, **M Woo**, C Steele, S Sukumaran, and S Anderson. 2020. Microplastics Differ Between Indoor and Outdoor Air Masses: Insights From Multiple Microscopy Methodologies. Applied Spectroscopy DOI: 10.1177/0003702820920652
2014-2016	**Pack, MA**, MB Heintz, WS Reeburgh, SE Trumbore, DL Valentine, X Xu, and ERM Druffel. 2015. Methane oxidation in the eastern tropical North Pacific Ocean water column. Journal of Geophysical Research-Biogeosciences 120. DOI:10.1002/2014JG002900 Valentine, DL, B Fisher, SC Bagby, RK Nelson, CM Reddy, SP Sylvac, and **MA Woo**. 2014. Fallout plume of submerged oil from Deepwater Horizon PNAS 111(45): 15906-15911.

Teaching Experience

CSU Channel Islands - Lecturer

General Chemistry Lab I	[Spring 2019]
Environmental Chemistry (soil and water)	[Fall 2018-2021]
Special Lab Topics in Chemistry	[Spring 2020]
Coastal Contaminants and Ecotoxicology	[Spring 2017-2022]
Environmental Film and Speaker Series	[Fall 2019]
Introduction to Environmental Science and Resource Management	[2016-2022]
Principles of Sustainability	[Fall 2019-2021]

California Lutheran University - Lecturer

General Chemistry Lab I and II	[Fall 2016-2017; Spring 2017-2018]
Introduction to Environmental Science	[Spring 2017; Fall 2017]

UC Irvine – Teaching Assistant

Introduction to Earth and Environmental Sciences	[Fall 2007]
Ocean Biogeochemistry	[Winter 2008]
The Atmosphere	[Spring 2008]

Research and Mentoring

2019-present

Regional Study with Southern California Coastal Water Research Project (SCCWRP)
Bight '18 microbiology coliphage study: evaluation of EPA method 1642 for enumeration of male specific and somatic coliphage in recreational waters and wastewater. Includes six paid undergraduate research students.

International Microplastic Intercalibration Study with SCCWRP
Developing, standardizing, and evaluating the accuracy and precision of microplastic analyses in collaboration with 30+ labs.

Air Quality Research in Ventura County with CARB and CFROG
Groundtruthing Air Quality Impacts in Ventura County; Discovering What We Cannot See. [CARB=California Air Resource Board and CFROG=Climate Firs: Replacing Oil & Gas].

Collaborative Work with Camrosa Water District
Trihalomethane analysis on treated wastewater with undergraduate students.

Service and Community Involvement

2018-2021

Board Member
Hueneme Foundation
SoCal SETAC [Southern California Chapter of Society for Enviro. Toxicology and Chemistry]

2019

Junior Scientist Faculty Mentor with Oxnard School District
Trash Assessment at University Preparation Charter School (UPCS). Haya Jaber, Jasmine Smith.
Haydock Middle School Junior Scientist Project Measuring Particulate Matter and Ozone. Natalie Chapman and Ruben Sanchez.
Microplastics at Lemonwood Elementary. Kaitlyn Odea and Sierra Harris.

2015-present

Peer Reviewer
Applied Spectroscopy; Progress in Oceanography
Limnology and Oceanography; Limnology and Oceanography: Methods

2018-present

Professional Memberships
SoCal SETAC

Manifest for Grant Application # GRANT13578952

Grant Application XML file (total 1):

1. GrantApplication.xml. (size 28305 bytes)

Forms Included in Zip File(total 6):

1. Form ProjectNarrativeAttachments_1_2-V1.2.pdf (size 16029 bytes)

2. Form SF424_3_0-V3.0.pdf (size 24110 bytes)

3. Form SF424A-V1.0.pdf (size 22733 bytes)

4. Form EPA4700_4_3_0-V3.0.pdf (size 22845 bytes)

5. Form OtherNarrativeAttachments_1_2-V1.2.pdf (size 16018 bytes)

6. Form EPA_KeyContacts_2_0-V2.0.pdf (size 37234 bytes)

Attachments Included in Zip File (total 11):

1. OtherNarrativeAttachments_1_2 OtherNarrativeAttachments_1_2-Attachments-1234-Final Ventura County Air Monitoring Quality Aussrance Statement Attachment (21 Mar 22).pdf application/pdf (size 120003 bytes)

2. SF424_3_0 SF424_3_0-AdditionalProjectTitle-1235-FINAL Ventura County Air Monitoring Project Narrative (21 Mar 22).pdf application/pdf (size 382827 bytes)

3. ProjectNarrativeAttachments_1_2 ProjectNarrativeAttachments_1_2-Attachments-1241-Final Ventura County Air Monitoring Quality Aussrance Statement Attachment (21 Mar 22).pdf application/pdf (size 120003 bytes)

4. ProjectNarrativeAttachments_1_2 ProjectNarrativeAttachments_1_2-Attachments-1240-FINAL Ventura County Air Monitoring Project Narrative (21 Mar 22).pdf application/pdf (size 382827 bytes)

5. SF424_3_0 SF424_3_0-AdditionalProjectTitle-1239-Final Ventura County Air Monitoring Quality Aussrance Statement Attachment (21 Mar 22).pdf application/pdf (size 120003 bytes)

6. ProjectNarrativeAttachments_1_2 ProjectNarrativeAttachments_1_2-Attachments-1242-Ventura County Air Monitoring Partnership Letters Attachment (21 Mar 22).pdf application/pdf (size 312961 bytes)

7. ProjectNarrativeAttachments_1_2 ProjectNarrativeAttachments_1_2-Attachments-1243-Ventura County Air Monitoring Resumes Attachment.pdf application/pdf (size 1395546 bytes)

8. SF424_3_0 SF424_3_0-AdditionalProjectTitle-1238-Ventura County Air Monitoring Support Letters attachment.pdf application/pdf (size 2552993 bytes)

9. SF424_3_0 SF424_3_0-AdditionalProjectTitle-1237-Ventura County Air Monitoring Resumes Attachment.pdf application/pdf (size 1395546 bytes)

10. ProjectNarrativeAttachments_1_2 ProjectNarrativeAttachments_1_2-Attachments-1244-

Ventura County Air Monitoring Support Letters attachment.pdf application/pdf (size 2552993 bytes)

11. SF424_3_0 SF424_3_0-AdditionalProjectTitle-1236-Ventura County Air Monitoring Partnership Letters Attachment (21 Mar 22).pdf application/pdf (size 312961 bytes)

DIANNE FEINSTEIN
CALIFORNIA

COMMITTEE ON THE JUDICIARY
- Chair, Human Rights and the Law
SELECT COMMITTEE ON INTELLIGENCE
COMMITTEE ON APPROPRIATIONS
- Chair, Energy and Water Subcommittee
COMMITTEE ON RULES AND ADMINISTRATION

United States Senate
WASHINGTON, DC 20510-0504
http://feinstein.senate.gov

March 17, 2022

The Honorable Michael Regan
Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, DC 20460

Dear Administrator Regan,

I write in support of the Port of Hueneme's application for funding from the Enhanced Air Quality Monitoring for Communities program, administered by the U.S. Environmental Protection Agency.

The Port of Hueneme is requesting funding for its Ventura County Air Quality Monitoring Project. If awarded, this grant would allow the Port of Hueneme to procure and install four air monitoring stations throughout underserved communities in Ventura County, including the Cities of Oxnard and Port Hueneme. The air monitoring stations will allow the community to monitor the presence of diesel particulate matter emissions in the region so that public officials can review live data and make informed decisions regarding the community's exposure to emissions. To support this project, the Port is partnering with the Ventura County Air Pollution Control District, California State University Channel Islands and Climate First: Replacing Oil & Gas.

I urge you to give the Port of Hueneme's application every consideration. Please keep my office informed of the status of this request, and if I can be of further assistance, please do not hesitate to contact my Los Angeles office at (310) 914-7300.

Sincerely,

Dianne Feinstein

Dianne Feinstein
United States Senator

DF:gm

Mr. Giles Pettifor
Environmental Manager
The Port of Hueneme
333 Ponoma Str
Port Hueneme CA 9304

Dear Mr. Pettifor,

I am writing to express my strong support for the Ventura County Air Quality Monitoring application which will be submitted to EPA's Enhanced Air Quality Monitoring for Communities.
The Port of Hueneme is partnering with the local air quality stakeholders including Ventura County Air Pollution Control District (VCAPCD), California State University Channel Islands (CSUCI), and Climate First: Replacing Oil & Gas (CFROG), a local community environmental advocacy group.

The project will procure and install four (4) air monitoring stations throughout the underserved communities in Ventura County California that include the Cities of Oxnard and Port Hueneme. This much needed project will provide community-wide information on the concentration and distribution of black carbon as a surrogate for diesel particulate matter emissions which is of primary concern to the region.

The community organization partnerships and public outreach efforts will keep the public informed and engaged on air quality in our region. The project will also enable key local and state decision makers to review live data and make informed decisions regarding exposure concerns that this community bears. I applaud and fully support the Port of Hueneme and its partners for being community leaders and continuing to engage our community in air quality awareness.

Sincerely,
Carolina G. Magaña
Carolina Gallardo Magaña
CEO
AIRE – Lucha, Inc. Subcommittee
(805) 612-4925

COMMITTEES
CHAIR: REVENUE AND TAXATION
AGRICULTURE
BUSINESS & PROFESSIONS
HIGHER EDUCATION
PRIVACY & CONSUMER PROTECTION
SELECT COMMITTEES
CHAIR: CYBERSECURITY

Assembly
California Legislature

JACQUI IRWIN
ASSEMBLYMEMBER, FORTY-FOURTH DISTRICT

STATE CAPITOL
P.O. BOX 942849
SACRAMENTO, CA 94249-0044
(916) 319-2044
FAX (916) 319-2144

DISTRICT OFFICE
2301 E. DAILY STREET, SUITE 200
CAMARILLO, CA 93010
(805) 482-1904
FAX (805) 482-1274

E-MAIL
Assemblymember.Irwin@assembly.ca.gov

March 21, 2022

Mr. Giles Pettifor
Environmental Manager
The Port of Hueneme
333 Ponoma St.
Port Hueneme CA 93041

RE: Support for the Ventura County Air Quality Monitoring Project

Dear Mr. Pettifor,

I am writing to express my strong support for the Ventura County Air Quality Monitoring application, which will be submitted to EPA's Enhanced Air Quality Monitoring for Communities. The Port of Hueneme is collaborating with the local air quality stakeholders, including Ventura County Air Pollution Control District (VCAPCD), California State University Channel Islands (CSUCI), and Climate First: Replacing Oil & Gas (CFROG), a local community environmental advocacy group.

The project will procure and install four air-monitoring stations throughout the underserved communities in Ventura County that include the Cities of Oxnard and Port Hueneme. This much needed project will provide community-wide information on the concentration and distribution of black carbon as a surrogate for diesel particulate matter emissions, which is of primary concern to the region.

The community organization partnerships and public outreach efforts will keep the public informed and engaged on air quality within our region. Additionally, this project will also empower key local and state policy makers to evaluate live data and make informed decisions regarding exposure concerns that this community bears.

The Port of Hueneme continues to be a role model for clean energy, works diligently to ensure healthy air quality for our community, and is also a significant economic contributor to Ventura County as well as to the Western United States. Due to the leadership, outreach, and positive contributions that the Port of Hueneme brings to our community, I applaud and fully support the Port of Hueneme and its partners for being community leaders and continuing to engage our community in air quality awareness. Please do not hesitate to contact my office at (805) 482-1904 should you have any questions.

Thank you for your consideration.

Sincerely,

Jacqui V

JACQUI IRWIN
Assemblylmember, 44th District